

Health Report

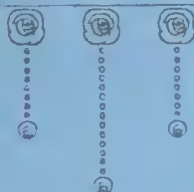
FOR

The City of Perth

For 1927

BY THE

Medical Officer of Health



PERTH :

PRINTED BY D. LESLIE, 20 ST. JOHN STREET

1928

Health Report

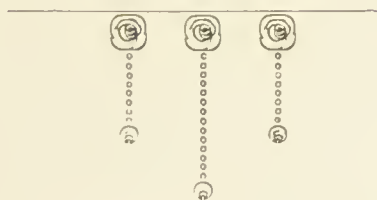
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*To the Honourable the Lord Provost, Magistrates and Members
of the Town Council of the City and Royal Burgh of Perth.*

Gentlemen,

*I have the honour to submit my Twenty-ninth Annual
Report upon the Health of the City for the year 1927.*

*As has been my usual custom I have incorporated several
Charts and Tables with the object of making the Report more
readily understood, if not also more interesting.*

*It is pleasing to report that the mortality for the year is 13·6
per 1000; a figure much below the average of previous years, in
fact only ·9 per 1000 above the record of 1923.*

*Two most gratifying features in the year's mortality have
to be recorded, viz.:—that nearly every second death occurred
in a person of 65 years and over—to be exact, 44·8 per cent. of
the total deaths were in persons of advanced age; and the
small number of deaths of infants—39.*

*This year's infantile death rate—68 per 1000 births—while
not constituting a record is well below what has been consid-
ered as a standard for a city, viz., 100.*

*One more satisfactory feature has to be reported. The
consumptive death rate continues low—·417 per 1000—a figure
only a fourth of what it was twenty-five years ago. On the
other hand the cancer rate continues high—1·4 per 1000—in
other words over 3 deaths to one of consumption. Formerly
the position was the reverse.*

*C. PARKER STEWART,
M.O.H.*

*Rockville, Barnhill,
Perth, March, 1928.*

Health Report for 1927.

AREA AND POPULATION.

THE registration area, as given by the Registrar-General, is 3,134 acres, while I estimate the population at 33,550. This represents 10·7 persons to an acre. The additional acreage, due to the extension of the Burgh boundary in 1909, was 1,017 acres.

BIRTHS.

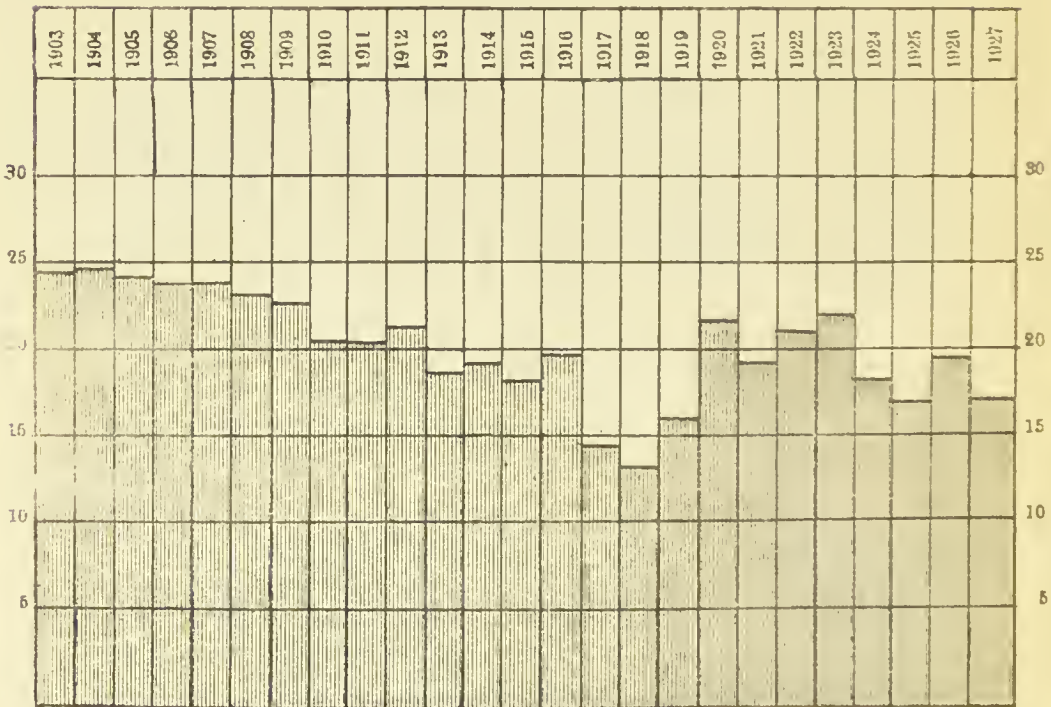
The Births registered in the Burgh during 1927 were 572. This represents a birth rate of 17 per 1000 living, as compared with 19·7 in the previous year. Of these 572 births 279 were males and 293 were females, while 46 were illegitimate. The proportion of illegitimate births to total births was 8 per cent., as compared with 6·8 in the previous year.

TABLE SHOWING THE NUMBER OF BIRTHS REGISTERED DURING EACH MONTH OF THE YEAR 1927.

MONTH.	Male.	Female.	Total.	Illegitimate.
January,	19	24	43	5
February,	25	26	51	4
March,	38	32	70	6
April,	27	30	57	5
May,	21	24	45	2
June,	20	21	41	3
July,	15	25	40	4
August,	23	27	50	2
September,	26	16	42	2
October,	26	20	46	5
November,	12	20	32	4
December,	27	28	55	4
Total, ..	279	293	572	16 or 8

An examination of the following Chart will show the steady decline which has taken place until the last few years. This declining birth-rate is a feature of all civilized races, and I stated in a previous Annual Report that I feared the upward tendency of the last year or two was not one which may be expected to continue. This has shown itself to be the case this year.

CHART SHOWING THE BIRTH RATE PER 1000 IN THE CITY
DURING THE PAST 25 YEARS.



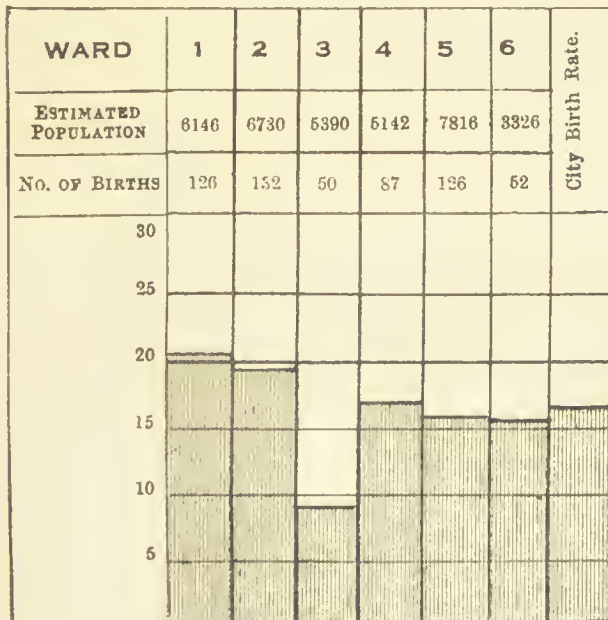
It will be noted from the foregoing chart how steadily the birth rate declined until 1918—in fact in 1899 the birth-rate was 28.1 per 1000 as compared with 12.8 per 1000 in 1918, a decline during a period of 20 years of 50 per cent.

While the birth-rate for the whole of the City is 17 per 1000, it may be noted that in two Wards—viz., Wards 1 and 2—this birth-rate is exceeded, while in the remaining Wards the birth-rate is below that of the City generally. In 1926 the City rate was exceeded in Wards 1, 2, 4 and 5. This year it is to be noted that in every Ward the birth-rate was lower, while Ward 3 has the lowest recorded birth-rate of which I have knowledge.

Ward 1 has the highest birth rate of 20·4 per 1000; Ward 2 has a birth rate of 19·6 per 1000; Ward 3 has the lowest birth rate of 9·2; Ward 4 has a birth-rate of 16·9; Ward 5 has a birth-rate of 16·1, and Ward 6 has a birth-rate of 15·6 per 1000.

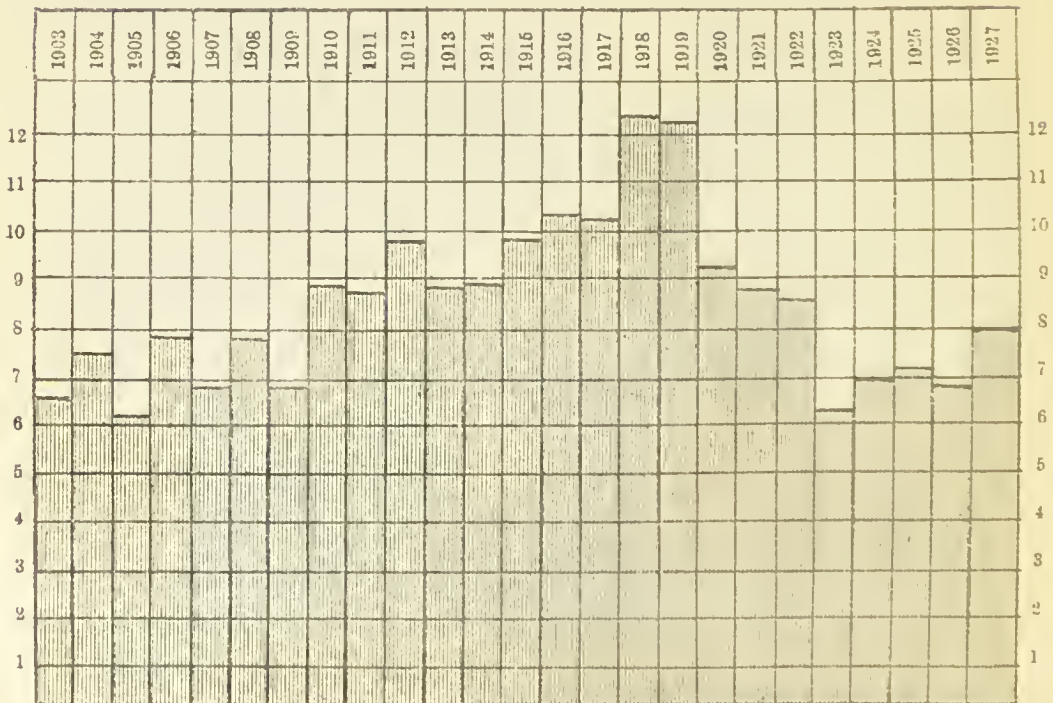
In 1926, Ward 1 had the highest birth-rate while again Ward 3 has the lowest.

CHART SHOWING THE WARD BIRTH RATE PER 1000 OF
POPULATION.



Connected with the birth-rate is the question of illegitimacy, and in looking back past years it may be noted that from 1899 to 1902 a gradual decline from 6.8 per cent. to 5 per cent. took place. From the accompanying chart it will be seen that from the latter year there tended to be a steady increase until it reached a record of slightly over 12 per cent. in 1918. In the year following the rate was very slightly lower, but in the succeeding years there was a considerable decline. During recent years the tendency has been the other way, and this year's figure stands at 8 per cent., as compared 6.8 per cent. in 1926, a figure considerably higher than one desires, but a great improvement over years of 1910-1922. It is at the same time only right to state that this unsatisfactory phase in relation to births is more than a local circumstance. Associated with illegitimacy, unfortunately, is an increased infantile mortality. This is especially so during the first month of life, and is largely due to the fact that, in addition to the causes of death common to all infants, the mother of the illegitimate child is often under circumstances where she cannot do justice to her child and, it may be, even indifferent to its welfare.

CHART SHOWING PERCENTAGE OF ILLEGITIMATE BIRTHS
DURING THE PAST 25 YEARS.



DEATHS.

The deaths registered in the Burgh during the year numbered 588, of which 142 were classed by our Registrar as rural, *i.e.*, persons dying within, but not belonging to the Burgh. There were no landward deaths.

TABLE SHOWING THE NUMBER OF CITY MALE AND FEMALE DEATHS DURING EACH MONTH OF THE YEAR.

(Not including deaths of citizens without the Burgh.)

MONTH.				Male.	Female.	Total.
January,	...	...	...	17	29	46
February,	...	...	...	20	26	46
March,	...	...	...	23	22	45
April,	...	...	...	25	18	43
May,	...	...	...	19	18	37
June,	...	...	...	18	13	31
July,	...	...	...	16	11	27
August,	...	...	...	10	13	23
September,	...	...	...	17	19	36
October,	...	...	...	15	11	26
November,	...	...	...	19	22	41
December,	...	...	...	18	27	45
Total of City,				217	229	446
Rural,				71	71	142
Total,				288	300	588

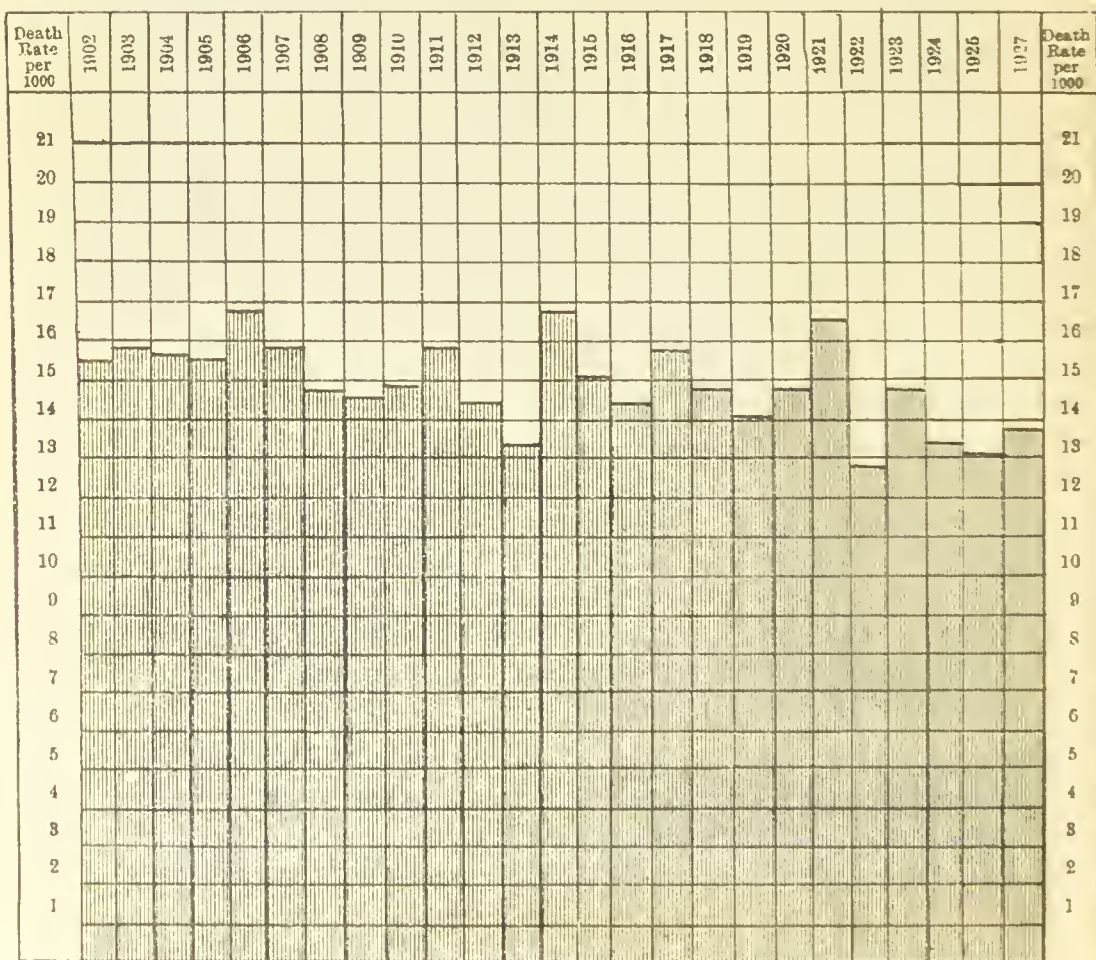
After taking into account the deaths of citizens outside the Burgh boundaries, 23 in number, the annual mortality rate for the year is 13·6 per 1000, as compared with 13 in 1926.

If we compare this year's death-rate with the death-rates of only 20 years back one cannot fail to find satisfaction in the present existing state of matters. Then, 18 to 20 per 1000 and even over

was the rule rather than the exception. In the preface to my annual reports of 1903 and 1906 I stated that these reports were not only the most satisfactory which it had been my province to submit, but, to the best of my knowledge, the most satisfactory which had ever been presented to the Local Authority—the annual mortality for the City being at the exceedingly low rate of 15·5 per 1000.

Again, in 1914, I was able to record that the death rate was only between 13 and 14 per 1000; while in 1923 the mortality rate was the lowest ever recorded in the annals of the City, viz., 12·7 per 1000. This year's rate is 13·6 per 1000, not a record, but a rate considerably lower than the average of the last 20 years, and shows that Perth has kept abreast of the times in things pertaining to the welfare of its inhabitants, more particularly when note is taken of the age periods of death.

CHART SHOWING THE DEATH RATE FOR THE PAST 25 YEARS.



One pleasing feature, which will be referred to again in more detail, is the fact that a large number of deaths occurred in old people, and it is gratifying to record that just on 45 per cent. of the total deaths occurred in persons over 65 years of age, being 2 per cent. less than in the previous year.

Looking at the monthly death rates, we find that the highest death rate was recorded in the month of February, when it reached 17.9 per 1000. The next highest monthly return was in January when it stood at 16.2, followed by March and December with 15.8. It will thus be seen that on no occasion did the monthly mortality reach as high as 20 per 1000, a rather unusual circumstance.

During February the most noticeable feature was the number of deaths among elderly people from diseases of the circulatory and respiratory systems; while deaths of infants were above the average. No less than 54 per cent. of the deaths in this month occurred in people over 65 years of age. In January, which had the second highest monthly mortality of 16.2 per 1000, infantile deaths, reached the highest point in the year; but the most important features were the large number of deaths attributed to circulatory and respiratory diseases and Cancer, no less than 17 or just on 37 per cent. of the total deaths of this month being due to these causes. In this month 34 per cent. of the total deaths were over 65 years of age.

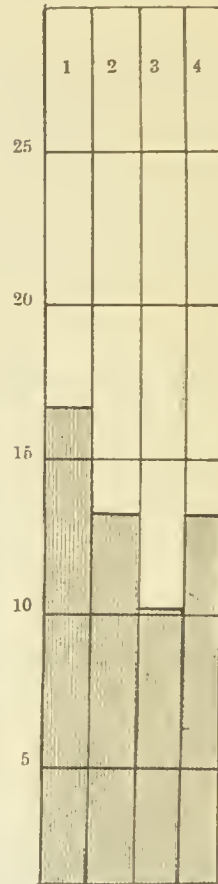
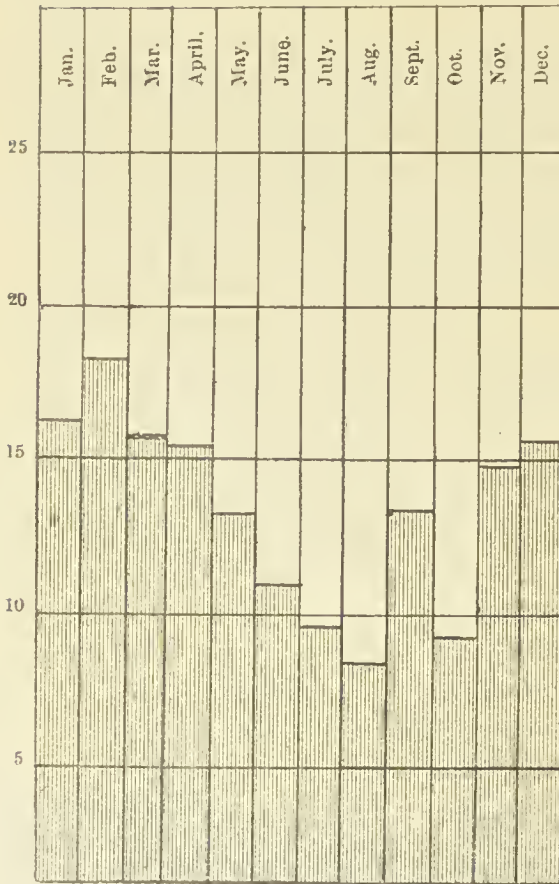
The lowest monthly rate occurred in June, August and October, and was 8.1 per 1000. As a rule the lowest monthly mortality has taken place in either July or September. During the month of August the most noticeable feature was the marked fall in deaths from diseases of the circulatory system, these having fallen from 11 to 2. The next two months with the lowest mortality were October and July with 9.1 per 1000 and 9.5 per 1000 respectively.

In the following months the death rate was above the annual rate, viz.:—January, February, March, April, November and December, while in the remaining 6 months it was below.

CHART SHOWING THE MONTHLY AND QUARTERLY DEATH RATES
PER 1000 OF POPULATION FOR THE YEAR 1927.

Monthly Death Rate.

Quarterly Death Rate.



Annual Mortality Rate = 13.6 per 1000.

Looking at the quarterly death returns, which were, 1st quarter 16.6 per 1000, 2nd quarter 13.2, 3rd quarter 10.2 and 4th quarter 13.2, it may be noted that all the quarters, with the exception of the first, were below the annual average. Compared with the previous year the quarterly death return is higher in the first, second and fourth quarters but lower in the third quarter.

WARD DEATHS.

TABLE SHOWING THE WARD DISTRIBUTION OF DEATHS, INCLUDING DEATHS OF CITIZENS OUTWITH THE CITY, DURING 1927.

DISTRICT.	Males.	Females.	Total
Ward 1,	54	49	103
Ward 2,	52	48	100
Ward 3,	36	30	66
Ward 4,	23	32	55
Ward 5,	46	56	102
Ward 6,	20	23	43
Total,	231	238	469

The figures given exhibit, however, no true relative mortality between the different Wards, because the population is different in each.

However, after careful consideration of the Census populations of 1911 and 1921 and the excess of births over deaths since the latter year, I have arrived at an estimate of the Ward population which I believe will give a fairly true index.

	Est. Pop.	Death Rate.	1926.
Ward 1,	6146	16·7 per 1000.	14·8 per 1000.
Ward 2,	6730	14·8 ,,	10·4 ,,
Ward 3,	5390	12·2 ,,	12·6 ,,
Ward 4,	5142	10·6 ,,	9·7 ,,
Ward 5,	7816	13 ,,	16·6 ,,
Ward 6,	3326	12·9 ,,	12·9 ,,

As compared with 1926 it will be noted that there has been an increased mortality in all the Wards, excepting Wards 3 and 5, more particularly noticeable in Wards 5 and 6. The respective increases are as follows:—Ward 1, 1·9 per 1000; Ward 2, 1·4 per 1000; Ward 4, ·9 per 1000; Wards 3 and 5 show a decrease of ·4 per 1000 and 3·6 per 1000 respectively; while Ward 6 remains the same. It will be noted that Ward 4 has the lowest death rate of the year. Last year the best Ward mortality also occurred in Ward 4. In 1924 it happened in Ward 1—a very exceptional occurrence.

TABLE SHOWING THE MORTALITY AT THE DIFFERENT AGE PERIODS
IN THE VARIOUS WARDS FOR THE YEAR 1927

AGE.	Ward I.	Ward II.	Ward III.	Ward IV.	Ward V.	Ward VI.	Total.
Under 1 year,	13	7	4	5	10	—	39
1—5 years (Infant period),	8	7	—	4	7	1	27
5—15 years (School period),	3	4	1	3	3	1	15
15—25 years (Adolescent period),	3	2	5	1	2	2	15
25—45 years (Mature period),	8	16	5	8	9	4	50
45—65 years (Late-mature period),	18	18	16	13	24	11	100
65 and upwards (Post-mature period),...	45	43	31	17	42	22	200
Total,	98	96	62	51	97	41	446

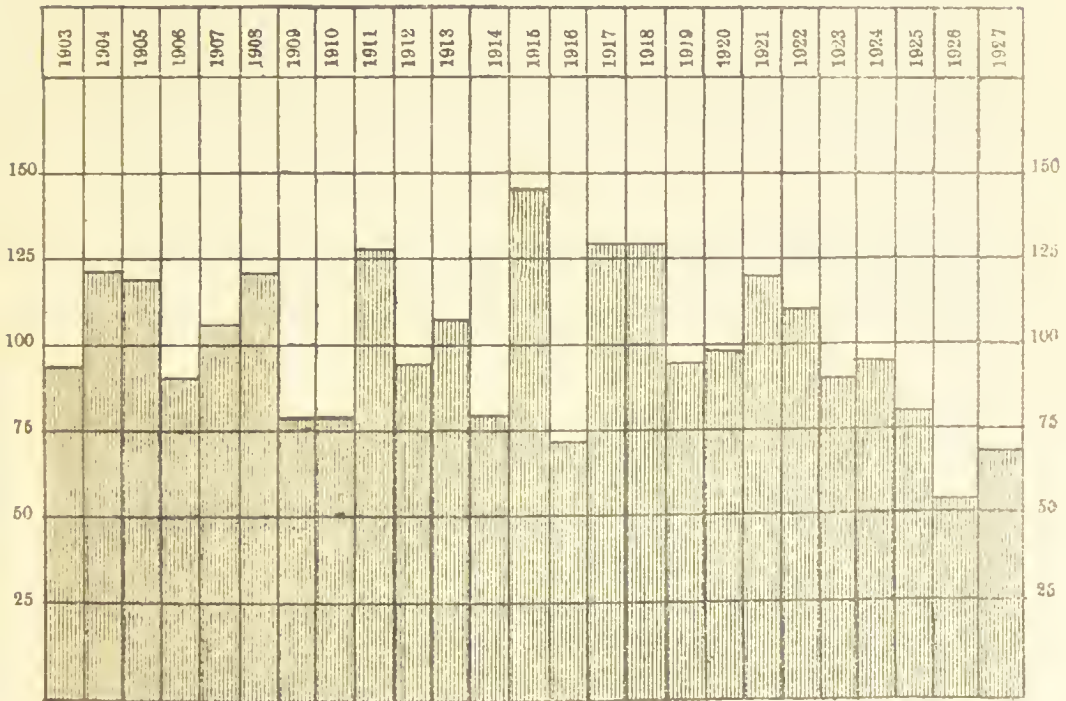
INFANTILE DEATHS.

The number of infants who died under one year was 39, so that the infantile death rate, or proportion of deaths of infants under one year to the registered births, is 68 per 1000 births, and is equal to 8 per cent. of the total deaths, the same as in 1926. Last year the number of infantile deaths was 36, equivalent to 54 per 1000 births.

In reviewing the deaths of infants for the past 25 years, as can

best perhaps be done by examining the following chart, it will be noted that on fourteen occasions the infantile death rate per 1000 births has been under the 100, the lowest recorded being 54 last year; on eight occasions between 100 and 125, and on four occasions between 125 and 150.

CHART SHOWING THE INFANTILE DEATH RATE PER 1000 BIRTHS
DURING THE PAST TWENTY-FIVE YEARS.



As has been done now for several years, a printed card with instruction on "The Care, Feeding, and Clothing for Infants" is given by the Registrar to the person registering the birth of a child where no medical man has been in attendance. This card, which is supplied with a hook, so as to be easily hung on the wall, is willingly given to anyone interested in the welfare of infants.

Having always considered this portion of the death returns as very important, I have in previous years given a detailed account of these infantile deaths, and the following table exhibits in a concise manner the causes and periods of infantile deaths belonging to the City.

INFANTILE MORTALITY FOR THE YEAR 1927.

Including deaths without, but belonging to, the Burgh.

CASES.	Under 1 day	2 days	3 days	4 days	5 days	6 days	7 days	Total under a week	Under 1 week	2 weeks	3 weeks	4 weeks	Total under 1 month	Under 2 months	3 months	4 months	5 months	6 months	7 months	8 months	9 months	10 months	11 months	Under 12 months	Total.
Premature Birth -	4	...	...	...	...	1	...	5	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	5
Congenital Malformations	...	1	1	...	1	...	...	3	1	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	4
Debility, Malnutrition -	...	...	...	...	...	...	...	...	1	1	...	...	1	2	2	2	...	...	...	...	...	...	...	...	7
Convulsions -	1	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Diarrhoea, Gastritis, Enteritis, &c. }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...	...	...	2
Whooping Cough -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	4
Measles -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Respiratory Diseases -	...	...	...	...	...	...	...	...	...	1	...	...	1	1	1	...	...	3	1	1	...	1	2	1	12
Tubercular Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nervous Diseases -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Overlain (Suffocation) -	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Burns or Scalds -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Causes -	2	...	...	...	...	...	...	2	...	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...	8
TOTAL.	7	1	1	1	1	1	...	11	2	1	...	...	14	4	4	2	2	3	1	2	1	2	2	2	39

The total number of deaths on the *first* day was 7. This is 4 more than the number of last year. As a rule, of the deaths during the first week the majority occur on the first day, and this is borne out in the preceding table, although last year the number was equalled by that of the third day.

The number of deaths within the *first* week was 11, being the same as last year at this period. This means that, of all the children who died under one year of age, nearly every third one died during the first week of infancy.

The cause of this percentage of deaths within the first week will be gathered from a consideration of the diseases which occasioned the deaths, many of the causes no doubt being attributed to maternal conditions.

During the *second* week there is a marked decline, in fact only three deaths being recorded at this period. As a rule, each succeeding week during the first month shows a decline as compared with the week before, and this is fully borne out this year.

The number of deaths within the **first** month was 14, showing a decrease of 4 as compared with last year, and is equivalent to 36 per cent. of the total infantile deaths, a smaller percentage than in the previous year.

As a result largely of the great number of deaths during the first week, the deaths during the first month are greatly in excess of any succeeding month, being more than four times the number of any succeeding month. In 1926 this was also the case.

The large percentage of infantile deaths is easily explained by glancing at the *causes* of death, where it will be seen that Premature Births accounted for 35 per cent. of all deaths at this early period. This is above the percentage of last year. If to these cases there be added the cases which died as the result of congenital malformations at birth, we find that of the infants dying during the *first* month no less than 64 per cent. were attributable to one or other of these two causes. Of the remaining deaths at this period, one was attributed to convulsions and one to neglect.

In the **second** month many of the weaklings who had survived a month succumb at this period. In this month, and succeeding

months, debility and malnutrition continue as a cause of death. No less than 6 deaths being attributed to Malnutrition and Debility, a total of 7 deaths. Of these, which one must believe in many cases might have been prevented, all occurred under the age of four months. These figures are deplorable, and one cannot but suspect, in fact be sure, that the majority of these deaths were directly the result of improper feeding.

There is no fact more clearly established regarding the health and life of infants among the poor than that they should be entirely breast-fed for at least six or seven months. Even in the poorest surroundings the breast-fed child stands a very good chance of living, for it escapes the pitfalls and dangers lurking behind food out of a bottle.

Breast feeding is out of fashion, and it is up to us to make it fashionable. Breast milk normally consists of a watery solution of proteins, sugar, vitamins, and various salts, along with fat globules suspended in it in the form of an emulsion. These ingredients vary in different women and at different times, according to the diet, exercise and physical condition of the mother.

If the mother is poorly fed, the milk suffers, though not so much as might be expected, for the tissues of the mother are drawn upon in a remarkable manner in such an emergency, in order to enable the cells of the breast to secrete normal milk. Emotion (such as anger and fear), shock and hysteria have more effect on the milk, both as regards quantity and quality, than the physical condition of the mother. Neurotic and emotional women are not good nursing mothers. A placid happy disposition, fresh air and moderate exercise encourage lactation. Alcohol is to be avoided. Stout or porter is still considered by many as a medicine for the production of milk. Its nutritive value is little or nothing. It is far from economical, and a spoonful of scotch oatmeal in a pint of water would not only be much more beneficial, but considerably less costly. She may not have the knowledge, and may be unable to exercise the careful preparation and storing of the food, which in a hot dry summer is apt to become contaminated and infected by flies.

Every woman, rich or poor, married or unmarried, should nurse her child, unless she suffers from certain diseases, or unless there be disabling defects or immaturity in the child.

Moreover, breast feeding has an enormous educational influence on the child. The child looks to the mother for what it needs most, and having obtained it, quietly sleeps till another time of need arises. This close mutual attachment has an important influence in fashioning the early mental and moral development of the child. Obedience, reverence, patience, endurance and punctuality can be gradually inculcated by a wise and sympathetic nursing mother during a six months breast feeding, and the future character of a child may thus be unconsciously created.

Unless the mother or child is losing weight or vitality, breast feeding should be continued for at least six months. Weaning of baby may be the start of trouble.

Mothers, with few exceptions, are anxious to do all they can for their babies and it is, generally, not from wilful neglect but from ignorance and carelessness that they do not do all that is right. Or it may be that they follow the advice of one who thinks she is well qualified to advise since she was the "mother of ten" who, by the will of Providence, were taken from her.

Competent and good mothers are to be found living side by side in the same street with ignorant and careless ones. The same wages are coming in, yet in one the house is tidy, the atmosphere sweet, and the children tidy; in the other squalour abounds, atmosphere stuffy, and the children dirty and verminous. The essential difference will be the amount of intelligence and care bestowed upon infant life and the wise or unwise spending of wages.

While the deaths in the first month reached 14, in the succeeding months the average was 2. But what must be particularly observed was that respiratory diseases were responsible for 6 deaths of infants at this period—truly, if not an appalling number, at least an appalling average, for we find that just on per 50 cent. of the deaths of infants between one and twelve months were the result of chest troubles. One pictures in one's mind that many of those deaths were preventable.

On the other hand Whooping cough and Diarrhoea, as factors in infant mortality, was absent throughout the year, while it is pleasing to record that no infant deaths occurred from burns or scalds or from having been overlain.

As regards the houses in which these infantile deaths occurred, it may be mentioned that 4 took place in the South Street and High Street, 3 in Meal Vennel and Barrack Street, 2 in Guard Vennel, Mill Street and Canal Street, and the remainder in different parts of the City. Last year not a single infantile death occurred in the High Street.

As regards occupations of Parents, the most prominent was that of railway servants, followed by that of hawkers, soldiers, painters, firemen, dyers and domestic servants. There were two cases of a domestic servant as compared with one last year. In former reports one had to deal with a fair number of deaths of infants whose mothers were servants and whose infants had been farmed out.

Another point may be noted, viz., that the death rate among the illegitimate is, as might be expected, considerably higher than among the legitimate. The number of legitimate births during the year was 526. Of these, 32 died—a percentage of 6 per cent. The illegitimate births were 40, with a death roll of 7, being equivalent to 17 per cent. Such figures would indicate two things, either that the class of parents of illegitimate children is of a very low order from a health point of view, or what is much more likely—is that the illegitimate child does not receive the kindly consideration and care which a legitimate child gets.

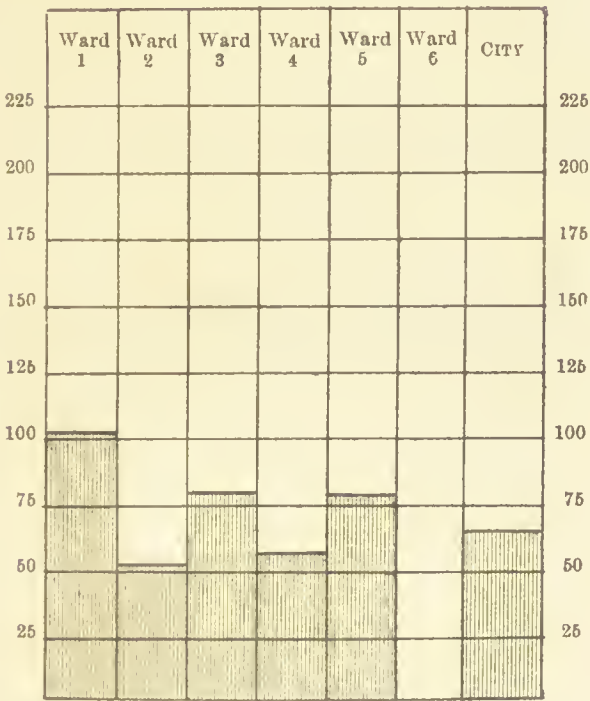
Parents have their duties to their children, so also has the State. It is not the duty of the State to take away a parent's responsibilities, but there are cases where, for the sake of the infant, the State must take action. We must be agreed as to the value of a child's life, not only from a State view, but from a natural and humanitarian point of view, and we must be determined to uphold it.

Considering these infantile deaths from a Ward point of view, and in relation to the births in each Ward, we find that

					1926.
Ward 1 has an infantile death rate of 103 per 1000 births					47
„ 2	„	„	53	„	82
„ 3	„	„	80	„	41
„ 4	„	„	57	„	8
„ 5	„	„	79	„	75
„ 6	„	„	—	„	39

the infantile death rate for the whole City being 68 per 1000 births.

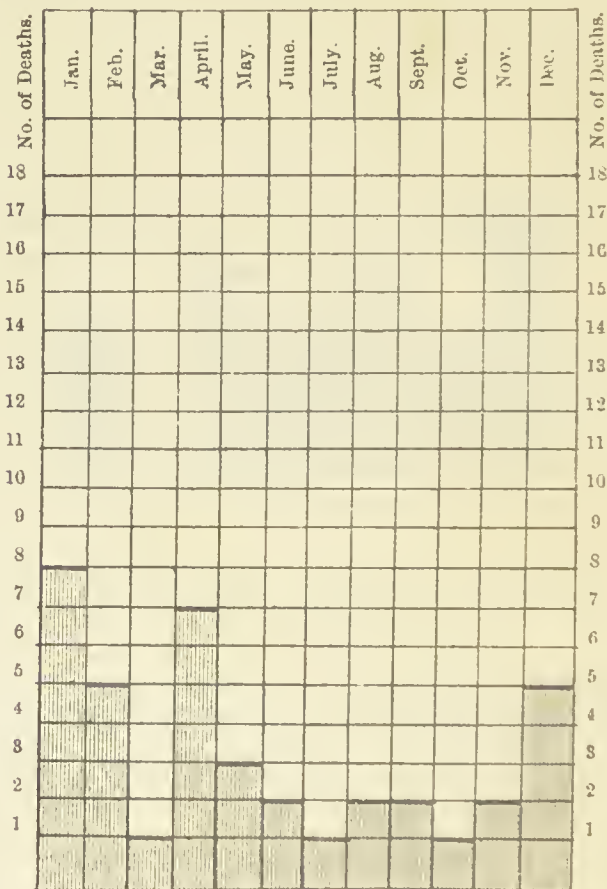
CHART SHOWING THE INFANTILE DEATH RATE PER 1000 BIRTHS
IN THE VARIOUS WARDS AND CITY.



This year not a single infantile death was recorded in Ward 6, followed by Wards 2 and 4. As is usually the case Ward 1 is the highest, although last year it was comparatively low, being only 47 per 1000 births as against 103 this year. In 1926 Ward 4 was lowest with 8 only, one death occurring in 114 births.

The following chart is interesting as showing how the infantile deaths vary throughout the year. In four months, viz., January, February, April and December, the number was above the monthly average; while in the remaining months it was below. The greatest monthly number was 8, and occurred in the month of January, followed by April with 7. In the months of March, July and October only one death was recorded.

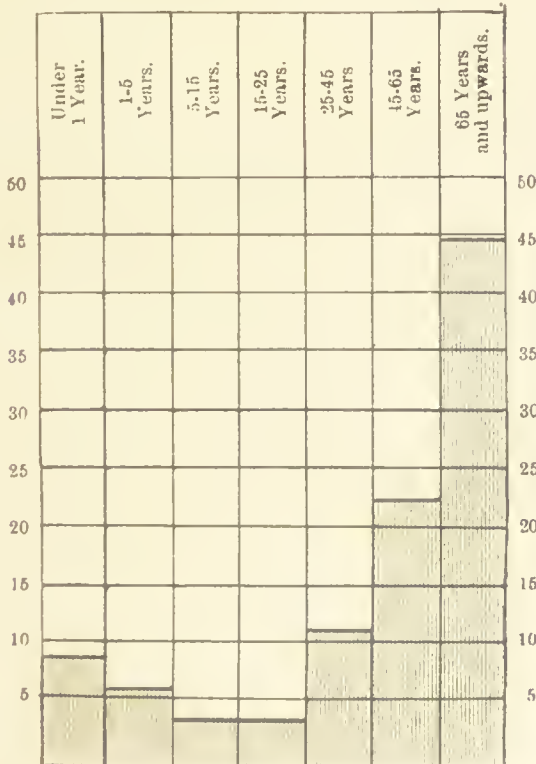
CHART SHOWING SEASONAL INFANTILE MORTALITY
DURING 1927.



OTHER AGE PERIODS.

. The deaths of children between 1 and 5 years were 27, being equivalent to 6 per cent. of the total deaths; between 5 and 15 years (school period) 15 or 3·4 per cent.; between 15 and 25 years (adolescent period) 15 or 3·4 per cent.; between 25 and 45 years (early mature period) 50 or 11·2 per cent.; between 45 and 65 years (late mature period) 100 or 22·4 per cent.; and at 65 years and upwards (post mature period) 200 or 44·8 per cent. Compared with last year the percentage of deaths at the post mature period has increased, slightly decreased, when it was 46·4 per cent. Of these post-mature deaths 46 were between 65 and 70 years, 100 between 70 and 80 years, 50 between 80 and 90 years, and 4 between 90 and 100 years, the oldest age recorded being 95 years.

CHART SHOWING THE MORTALITY AT THE DIFFERENT AGE PERIODS AS PERCENTAGE OF THE TOTAL DEATHS.



CAUSES OF DEATH.

(1.) ZYMOTIC DISEASES.

The number of deaths ascribed to zymotic causes, including those from septic causes—Septicæmia, Pyæmia, Puerperal Fever, and Erysipelas—and those from Diarrhœa, Gastritis, and Gastro-Enteritis, as well as those from Venereal disease, was 40, which is equivalent to a death rate of 1·19 per 1000 persons living.

TABLE SHOWING THE MORTALITY FROM PRINCIPAL ZYMOTIC DISEASES
AT THE DIFFERENT AGE PERIODS.

DISEASE.	Under 1 Year.	1-5 Years.	5-15 Years.	15-25 Years.	25-45 Years.	45-65 Years.	65 and upwards.	Total.	Death Rate per 1000.	1926	
										Total.	Death Rate per 1000.
Erysipelas -	...	...	...	...	...	...	1	1	·029	2	·059
Diphtheria -	...	2	5	...	...	...	...	7	·208	2	·059
Scarlet Fever	...	2	1	...	...	...	...	3	·089	2	·059
Typhoid Fever }	...	...	...	...	...	...	...	...	...	..	...
Measles -	...	2	...	...	...	...	...	2	·059	2	·059
Whooping Cough }	4	3	..	...	...	...	...	7	·208	4	·118
Influenza -	...	1	...	...	2	1	6	10	·298	8	·236
Diarrhœa, in- cluding Gas- tritis and Enteritis }	2	...	...	...	...	1	1	4	·110	1	·029
Polio- myeli- tis Ant. Ac. }	...	...	...	...	...	...	...	...	·029	1	·029
Epidemic Encephali- tis }	...	...	..	..	1	2	...	3	·089	1	·029
Puerperal Fever }	..	...	...	..	2	..	...	2	·059	2	·059
Septicæmia -	...	...	...	...	1	...	..	1	·029	...	..
Total -	6	10	6	..	6	4	8	40	1·19		
1926 -	4	5	4	...	5	2	6	26	·777		

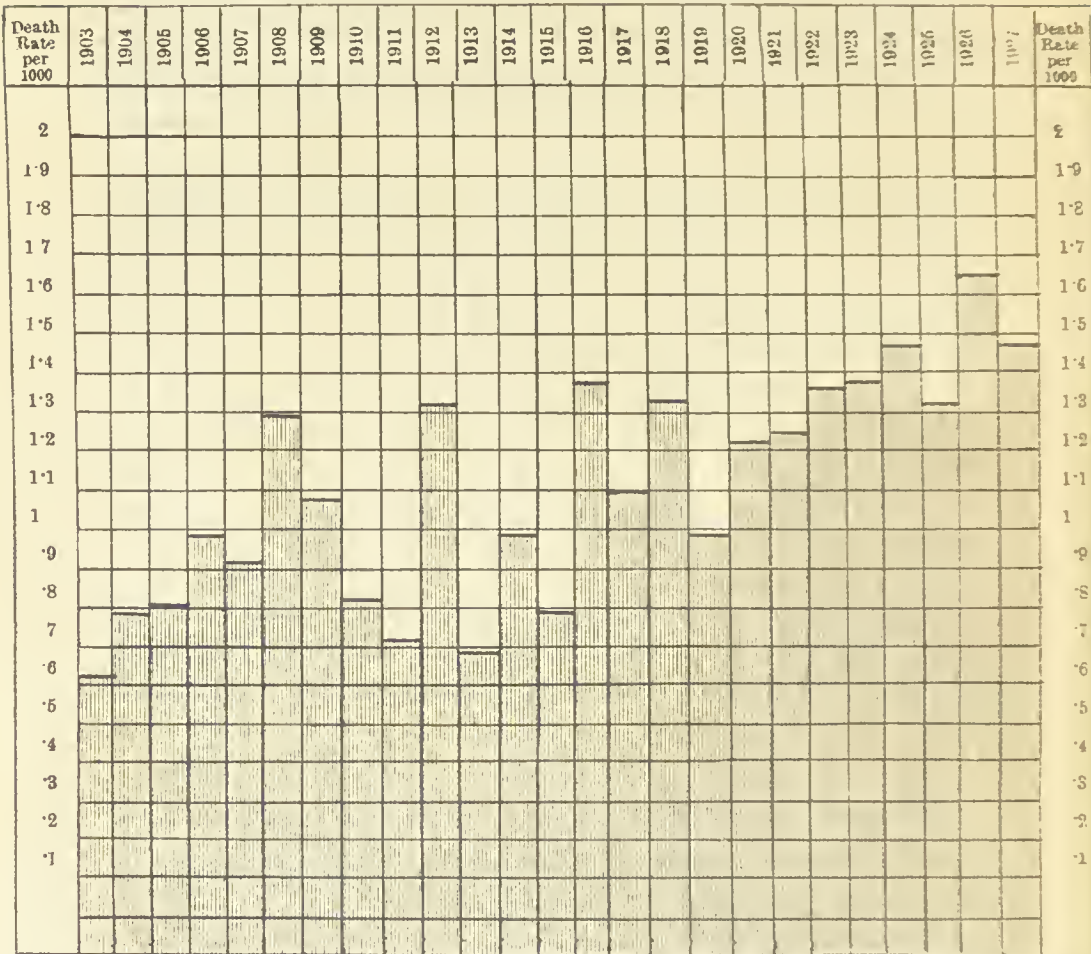
From the foregoing it will be seen that there has been a considerable rise in the zymotic death rate, having risen from .77 of the previous year to 1.19. The main increases have occurred in the following diseases—Diphtheria from .05 to .20, Diarrhœa from .02 to .11, Whooping Cough from .11 to .20, and Influenza from .23 to .29. On the other hand Erysipelas fell from .05 to .02, and Poliomyelitis from .02 to nil, while Measles remained the same. Ten deaths occurred from Influenza, mainly in elderly people, as compared with 8 in 1926. No death was attributed to Syphilis. That this is a true index of the prevalence of the disease I have grave doubt. In 1926 one death and in 1925 four deaths were attributed to this disease.

(2.) CONSTITUTIONAL DISEASES.

The deaths from this class of disease, including deaths outwith the Burgh, numbered 79, representing a proportion of 2.35 per 1000 living.

Cancer is the principal disease. In 1912 deaths from Cancer for the first time outnumbered those resulting from Consumption, and this year has been more than repeated, in fact the deaths number more than three times those of Phthisis. It appears evident from a study of mortality tables for past years that this disease tends to be on the increase, although the deaths this year are less than in 1926. The deaths from Cancer numbered 49, and were equivalent to a death rate of 1.46 per 1000, as compared with 1.64 per 1000 in 1926.

CHART SHOWING THE DEATH RATE FROM CANCER OR MALIGNANT DISEASE DURING THE PAST TWENTY-FIVE YEARS.



Phthisis, or tuberculosis of the lungs, which used to be classed as a constitutional disease, has been a notifiable disease since 1912. During the year 14 deaths occurred from this cause. Three occurred between 15 and 25 years, 9 between 25 and 45 years, and 2 between 45 and 65 years of age. This is 3 more than in the previous year, and based on the estimated population of 33,550, is equivalent to .417 per 1000, as compared with .329 in 1926.

The percentage of deaths to total deaths was 3·1, and the death rate as stated was equivalent to ·417 per 1000 persons living. Compared with the corresponding figures of 1900, viz., 9·2 percentage to total deaths and a death rate of 1·9 per 1000, it will be evident that the factors which made this disease to be classed as the "white scourge," are slowly but surely being got under control.

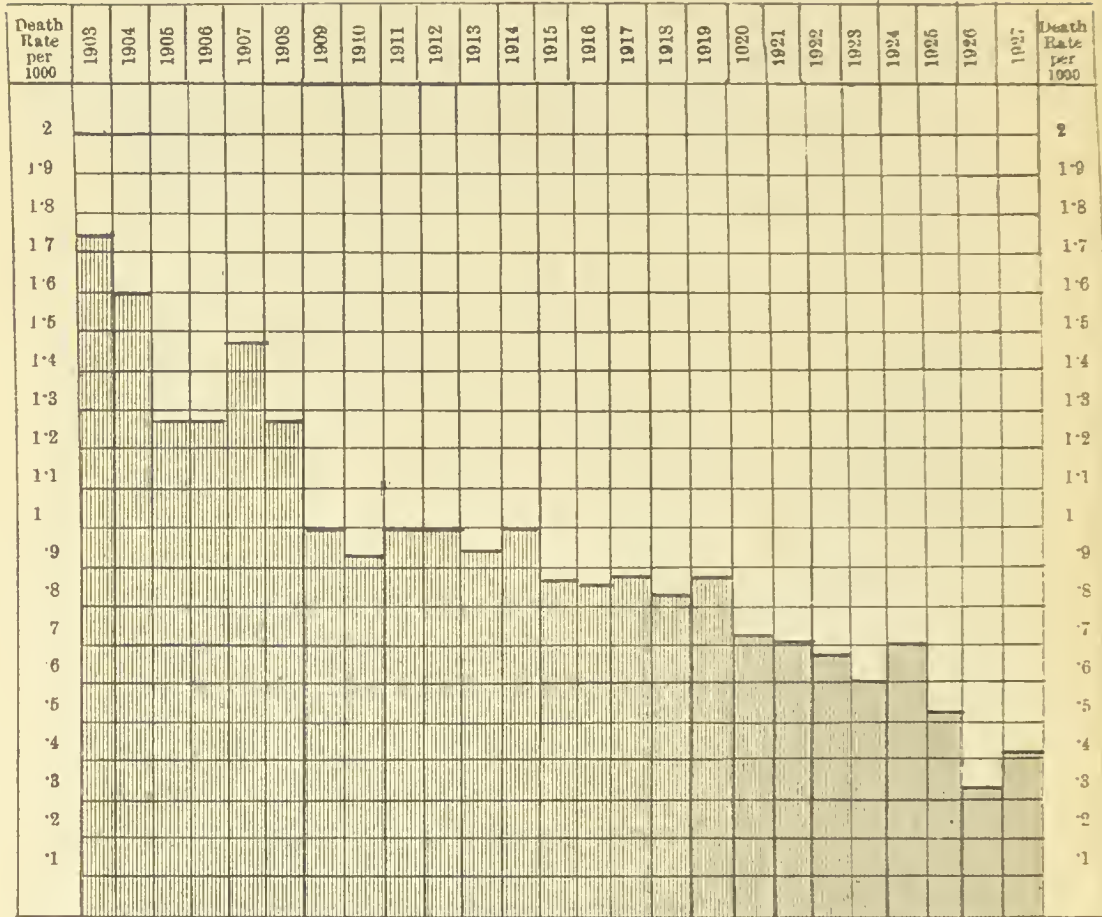
The Ward distribution of these deaths was as follows:—Ward 2, 5 deaths; Ward 3, 1 death; Ward 5, 4 deaths; Ward 6, 4 deaths. If we judge these figures by the respective population of each Ward, we find that—

				1926.
Ward 1	has a consumptive death rate of	—	per 1000.	·48
Ward 2	„	„	„	·74 „ ·44
Ward 3	„	„	„	·18 „ —
Ward 4	„	„	„	— „ ·58
Ward 5	„	„	„	·51 „ ·29
Ward 6	„	„	„	1·20 „ —

In previous reports I have given considerable space to a description of this malady, as well as to the preventive measures to be adopted, both by the individual and by the Local Authority, to stamp this disease out of the country, but it is well to again record that an important administrative change has occurred as regards the treatment of insured persons. In 1920 the treatment of these insurance patients, which was undertaken by the Local Insurance Committee, came within the scope of the Local Authority's duties, and now, not only has the Local Authority to provide institutional treatment or domiciliary treatment in the way of granting provisions where considered necessary, and the payment of medicine incurred under the treatment of the doctor, but they are also now responsible for the care of all forms of tuberculosis.

The death rate from this cause, though not a record for the City, as was the case last year, is the second lowest consumptive death rate, of which I have knowledge, and a glance at the following chart will show how satisfactory has been the decline during the past years.

CHART SHOWING THE DEATH RATE FROM PHTHISIS DURING THE
PAST TWENTY-FIVE YEARS.



(3.) LOCAL DISEASES.

The number of deaths registered under this class was 255. These causes give a death rate of 7.6 per 1000, as compared with 6.7 in 1926. No death was attributed to diseases of the lymphatic system, or to a disease of an organ of special sense, *e.g.*, the ear, while deaths as the result of "confinement" numbered two, being three less than in the previous year.

As has been the case in previous years, deaths from nervous, respiratory and circulatory causes are the most prominent.

As regards respiratory troubles, Bronchitis is the commonest, followed by Broncho-pneumonia and Pneumonia. 12 deaths of infants, 11 deaths of children between 1 and 5 years of age, and 14 deaths of persons over 65 years of age occurred from pulmonary trouble. This is a number somewhat more than last year.

Attention has already been drawn to the number of infantile deaths from respiratory disease, and when we add to that number the number of those dying between the age of one and five years, we have a total of 23—a figure 7 more than last year, and a figure surely capable of reduction. Nay, does it not give ample proof of carelessness or ignorance on the part of many parents that 34 per cent. of infantile deaths and 40 per cent. of deaths between 1 and 5 years should result from Respiratory trouble.

Nervous diseases account for 50 deaths. No less than 32 deaths took place from apoplexy, and of these the great majority occurred in people over 60 years of age; in fact, no less than 22 occurred in persons over 65. As regards diseases of the Circulatory System, 27 deaths were attributed to heart disease and 8 to syncope, and a large number to disease of the arteries.

(4). VIOLENCE.

The number of deaths attributed to "violent" causes during the year was 23, being eight more than in 1926. Three were due to railway vehicles, and four the result of coal gas poisoning. Drowning was the cause in two instances, while nine deaths arose as the result of fall, &c. One death occurred in an infant from overlying and one in a child from burns. There was one case of lysol poisoning, and one death resulted from hanging.

The cases attributed to suicide numbered 7, being 5 more than in 1926.

SUMMARY OF DEATHS.

I. SPECIFIC FEBRILE OR ZYMOTIC DISEASES—

			1927	1926
1. Miasmatic Diseases	...	...	32	21
2. Diarrhœal (Enteritis, etc.)	...	...	—	1
3. Malarial	...	...	—	—
4. Zoogeneous	...	...	—	—
5. Venereal	...	...	—	1
6. Septic	...	...	4	4

II. PARASITIC DISEASES — —

III. DIETETIC DISEASES 2 2

IV. CONSTITUTIONAL DISEASES .. 79 88

V. DEVELOPMENTAL DISEASES ... 38 52

VI. LOCAL DISEASES—

1. Diseases of Nervous System	...	51	59
2. Diseases of Organs of Special Sense	...	—	—
3. Diseases of Circulatory System	...	113	77
4. Diseases of Respiratory System	...	52	52
5. Diseases of Digestive System	...	17	16
6. Diseases of Lymphatic System and Ductless Glands	...	—	—
7. Diseases of Urinary System	..	19	19
8. Diseases of Organs of Generation	...	3	—
9. Diseases of Organs of Parturition	...	2	5
10. Diseases of Locomotory System	...	—	—
11. Diseases of Integumentary System	...	—	—

VII. VIOLENCE—

1. Accident or Negligence	...	16	13
2. Suicide	...	7	2

VIII. ILL-DEFINED OR NON-SPECIFIED

CAUSES	...	11	24
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Total	...	446	435
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NOTIFIABLE INFECTIOUS DISEASE.

The total number of notifiable diseases recorded during the year 1927 was 493, as compared with an average of 336 in the previous ten years.

TABLE SHOWING THE WARD DISTRIBUTION OF CASES NOTIFIED DURING THE YEAR 1927, WITH NUMBER OF CASES TREATED IN HOSPITAL.

NATURE OF DISEASE.	WARD 1.		WARD 2.		WARD 3.		WARD 4.		WARD 5.		WARD 6.		Treated in Hospital	Treated in Home	Total
	Under 5 years	5 years & over	Under 5 years	5 years & over	Under 5 years	5 years & over	Under 5 years	5 years & over	Under 5 years	5 years & over	Under 5 years	5 years & over			
Chickenpox, ...	12	20	11	21	5	21	13	29	19	31	2	12	1	195	196
Typhoid Fever, ...	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum,	...	...	4	...	...	...	...	2	...	...	...	...	4	2	6
Pneumonia, ...	...	3	...	3	...	2	...	...	1	2	..	...	...	11	11
Scarlet Fever, ...	13	21	10	10	2	9	3	22	6	28	2	14	104	36	140
Diphtheria, ...	3	11	1	13	...	2	2	14	1	9	...	7	61	2	63
Erysipelas, ..	...	...	...	4	...	4	...	3	...	6	...	2	3	16	19
Phthisis, ...	...	5	...	9	...	5	...	2	...	4	...	3	13	15	28
Tuberculosis other than Phthisis,	1	4	...	2	1	5	...	2	2	5	...	1	18	5	23
Encephalitis Lethargica	...	...	...	1	...	2	...	...	...	..	...	...	1	2	3
Puerperal Fever, ...	...	...	...	...	...	...	...	3	...	...	...	...	3	...	3
Dysentery, ...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
	29	64	26	63	8	50	18	78	29	85	4	39	209	284	493
TOTAL,	93		89		58		96		114		43				

As compared with the previous year there has been 203 more cases notified. This increase is largely accounted for by the notification of Chickenpox having been made compulsory. This disease was fairly prevalent in the City, especially during the months of April, May, June and July, and a total of 196 cases was reported, one of which was removed to the hospital.

I am glad to report that there has been no recurrence of Small-pox or Typhus Fever. It is nearly thirty years since there was a case of the latter disease in Perth, and then it was a case of a tramp from Glasgow. No case of Cerebro-Spinal Fever was reported but three cases of Sleeping Sickness were notified.

The average monthly number of cases was 41, being exceeded on five occasions, these occurring mainly in the second quarter of the year. The largest number of cases was reported in April, May and October, in the former two months, as the result of the large number of cases of Chickenpox, the notifiable cases for these months being 86, 81 and 49 respectively. The smallest number occurred in August, when only 15 cases of infectious disease were notified, followed by 20 and 32 in February and July. In fact 42 per cent. of the cases were notified in the second quarter of the year.

As regards the age period, 119 were under 5 years of age, and 374 above that period. Last year the number affected at the infant period was 19 per cent. of the total. This year the percentage has increased, having risen to 24 per cent. With the exception of a few cases of ophthalmia neonatorum, diphtheria and tuberculosis, these infant cases were scarlet fever cases.

The number of these notifiable cases, including one or two cases in the Infirmary, treated in Hospital or Sanatorium was 209, or 42 per cent. of the total cases, as compared with 65 per cent. in the previous year.

With reference to the Ward Distribution of these Infectious Diseases, if we consider (which is the proper way) the cases as so many per 1000 of the population of each Ward (or better still, were that possible, as so many per 1000 of the young people in each Ward) we find that Ward 3 with 10·7 per 1000 stands for the year as the Ward freest from infectious trouble, while Ward 4, followed by Ward 1, was the most affected.

The figures for the various Wards are:—

	1926
Ward 1 = 15·1 per 1000 of estimated population,	8·4
Ward 2 = 13·2 " " "	9·8
Ward 3 = 10·7 " " "	6·8
Ward 4 = 18·6 " " "	11·7
Ward 5 = 14·5 " " "	6·4
Ward 6 = 12·9 " " "	9·3

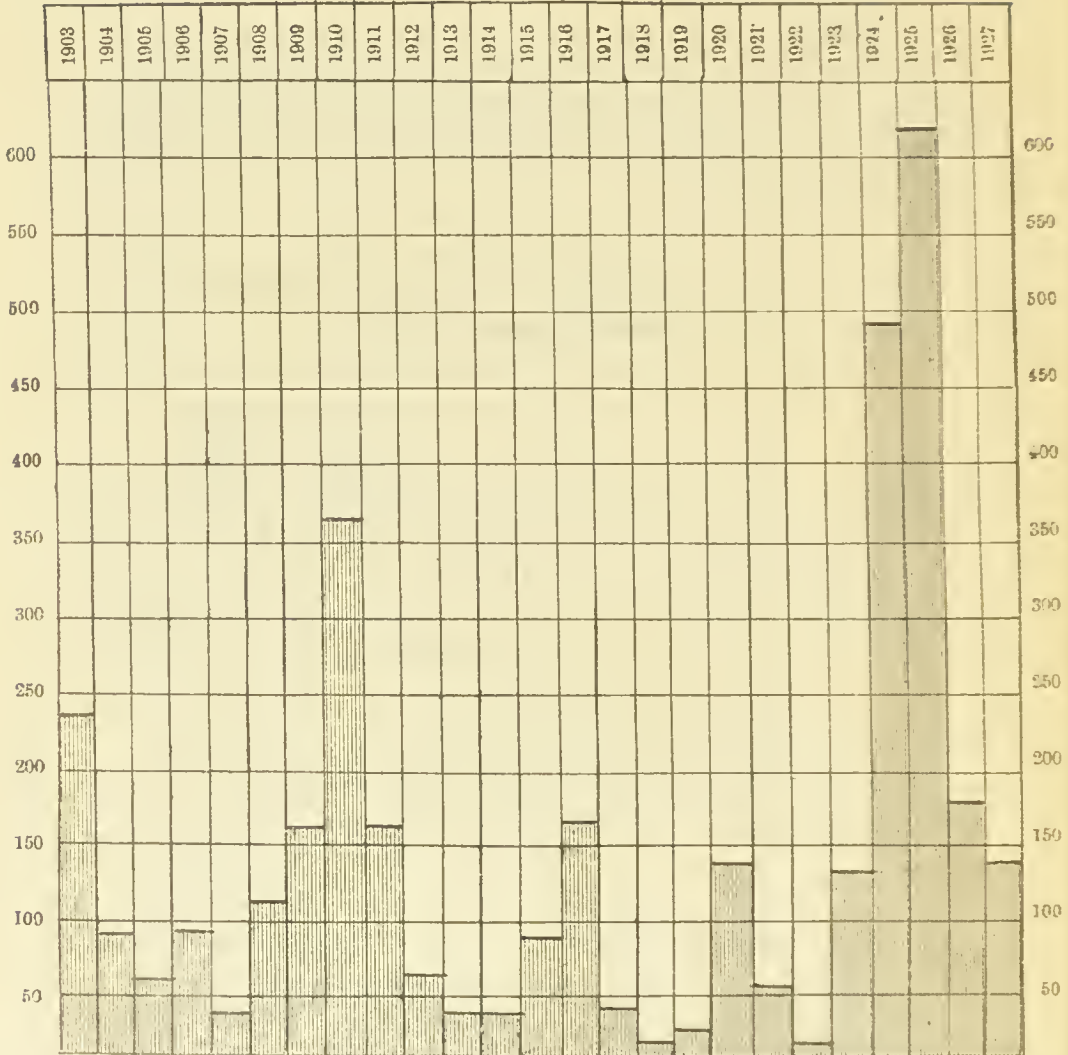
In 1926, Ward 5 was the freest from infectious disease, followed by Ward 3, whereas this year the premier position is taken by Ward 3. It may also be noted that, as in the previous year, Ward 4 was the most affected.

TABLE SHOWING THE PERCENTAGE OF CASES TREATED IN HOSPITAL DURING 1927.

DISEASE.	Total.	Treated in Hospital or Sanatorium.	Percentage of Cases treated in Hospital.
Chickenpox,	196	1	·5
Typhoid Fever, . . . . .	...	...	...
Oph. Neonatorum,	6	4	66
Pneumonia,	11	...	...
Scarlet Fever,	140	104	73
Diphtheria,	63	60	95
Erysipelas,	19	3	15
Encephalitis Lethargica	3	1	33
Phthisis,	28	13	46
Tuberculosis (other than Phthisis),	23	19	82
Puerperal Fever,	3	3	100
Dysentery	1	1	100
Total,	493	209	42

SCARLET FEVER.

CHART SHOWING THE NUMBER OF CASES OF SCARLET FEVER
NOTIFIED DURING THE PAST TWENTY-FIVE YEARS.

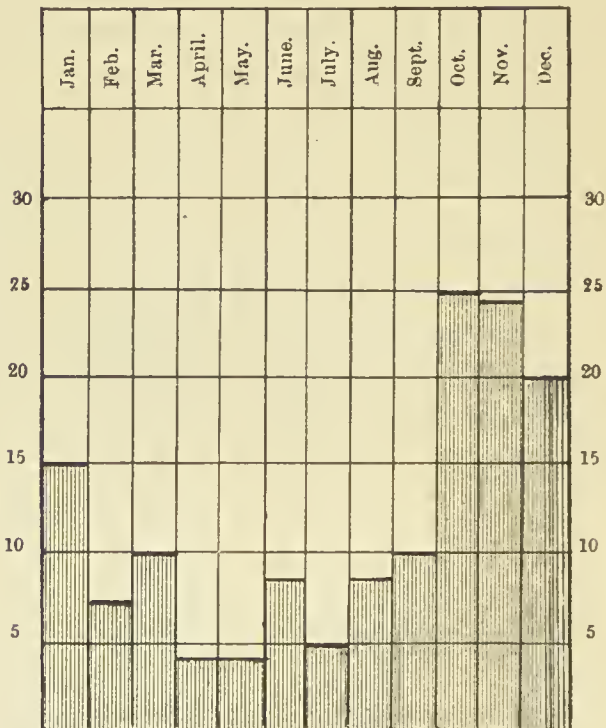


A glance at the chart recording the cases during the past twenty-five years will clearly show the tendency of this disease to lie more or less quiescent for some years and then manifest itself.

In 1922 only 19 cases were notified, followed in the following year with 138. In 1924 there was an increase of 357. In the following year there was a further increase, this figure being exceeded by 68, viz. :—563, and constituting a record in the annals of the City. In 1926 there was, as was to be expected, a marked decrease, the number having fallen to 172, or 391 less than in 1925. This year the number had further declined to 140, and, as will be noted from the monthly chart, the disease was most prevalent in the last quarter of the year. The lowest point reached was during the months of April and May, the cases for these two months numbering four. With the opening of the schools there was a recrudescence, and this continued during the remainder of the year.

During the first quarter of the year there were 32 cases or 22 per cent., followed by 11 and 16 per cent. in the second and third quarters, while the fourth quarter was responsible for 49 per cent. The greatest number in any one month occurred in October, when 25 cases, or 18 per cent. of the total, were notified. This was followed by the month of November, when there were 24 cases. As already stated, the lowest number in any single month was in April and May, viz., 4.

CHART SHOWING THE NUMBER OF CASES OF SCARLET FEVER
DURING THE YEAR 1927.



As regards the sex, 80 cases occurred among females and 60 among males ; while as regards the age period, 35 occurred among children under 5 years of age, or 25 per cent. This is a lower percentage than the previous year, when it stood at 27 per cent. As regards the other age periods, 77 or 55 per cent. occurred between 5 and 15 years, 19 or 13 per cent. between 15 and 25 years, and 9 or 6 per cent. between 25 and 45 years.

As regards the Ward Distribution, Ward 3 is the lowest with 2 per 1000, followed by Ward 2 with 2.9 per 1000. Ward 1 followed by Wards 4 and 6, had the highest. The figures relating to the various Wards for 1927, with comparison for 1926, are as under:—

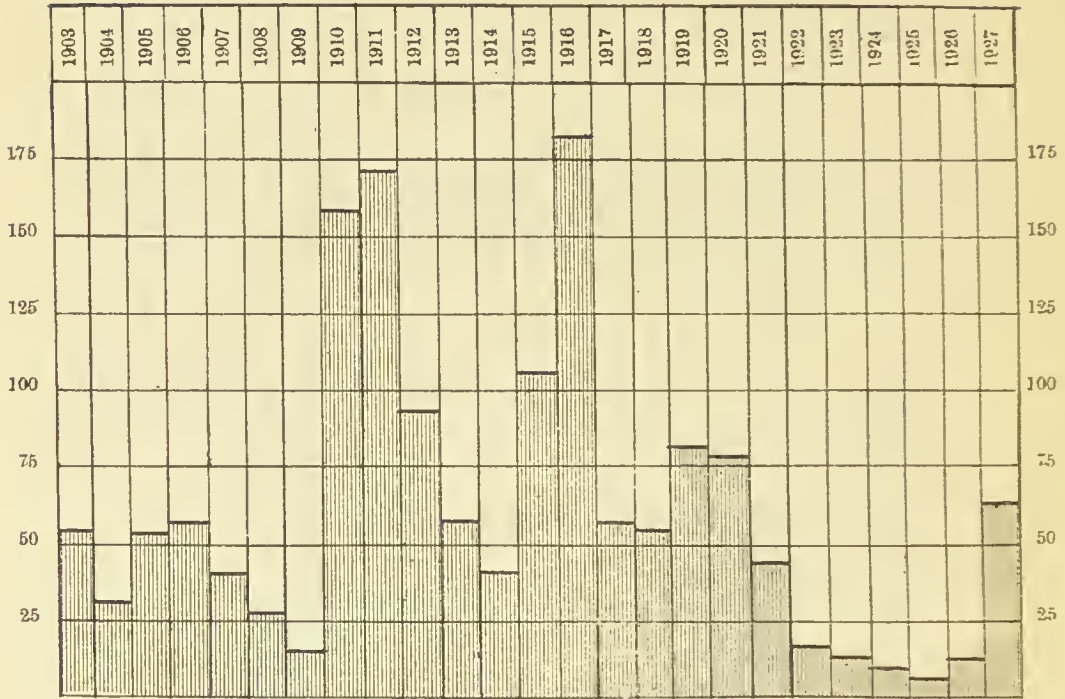
		Cases.	1926.
Ward 1	...	34 or 5.5 per 1000,	4.7 per 1000.
Ward 2	...	20 or 2.9 ,,	7 ,,
Ward 3	...	11 or 2 ,,	3.7 ,,
Ward 4	...	25 or 4.8 ,,	6.8 ,,
Ward 5	...	34 or 4.3 ,,	3.9 ,,
Ward 6	...	16 or 4.8 ,,	4.2 ,,
<hr/>			
140			

The number removed to Hospital was 104, or 73 per cent. of the whole. In the previous year the percentage was 75.

During the months of the last quarter of the year, when the disease was at its maximum, the type of fever was more virulent, with a corresponding degree of complications. Notwithstanding, the mortality rate was not high. There were 3 deaths, representing a death rate of .089 per 1000, or a case mortality of 2.1 per cent. as compared with 1.1 in the previous year.

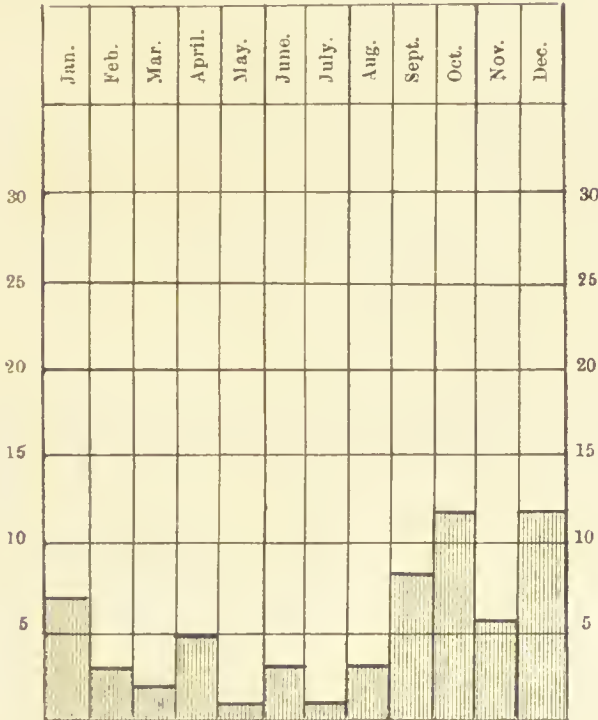
DIPHTHERIA.

CHART SHOWING THE NUMBER OF CASES OF DIPHTHERIA DURING
THE PAST TWENTY-FIVE YEARS.



As is evident from the foregoing chart, Diphtheria was epidemic in the City during the years 1910-1912, and again in 1915-1916. Since the latter year there was, with the exception of 1919 and 1920, a continuous decline, reaching in 1925 a number which was the lowest yet recorded, viz., 11. In 1926 the number showed a slight increase, viz., 17; but this year there has been a further increase, the number notified being 63. I see no reason to believe that this rise will continue during the ensuing year.

CHART SHOWING THE NUMBER OF CASES OF DIPHTHERIA
DURING THE YEAR 1927.



The Wards most affected were Wards 4, 1 and 2, while Ward 3, singularly, had only 2 cases throughout the year, or only 3·1 per cent. of the total. Most of the cases occurred during the last three months of the year, close on 48 per cent. happening at this period. The largest number of cases occurred in the months of October and December, when 12 cases were reported, followed by September and January with 8 and 7 cases. In the months of May and July only one case was reported.

Females were more affected than males, the figures, out of a total of 63 cases being 36 and 27 respectively.

With reference to the age period, 6 cases occurred in children under 5 years of age, representing 9 per cent. of the total cases. This is an unusually small percentage.

As regards the other age periods, 41 or 65 per cent. occurred between 5 and 15 years, 7 or 11 per cent. between 15 and 25 years,

8 or 12 per cent. between 25 and 45 years, and one over 65 years of age.

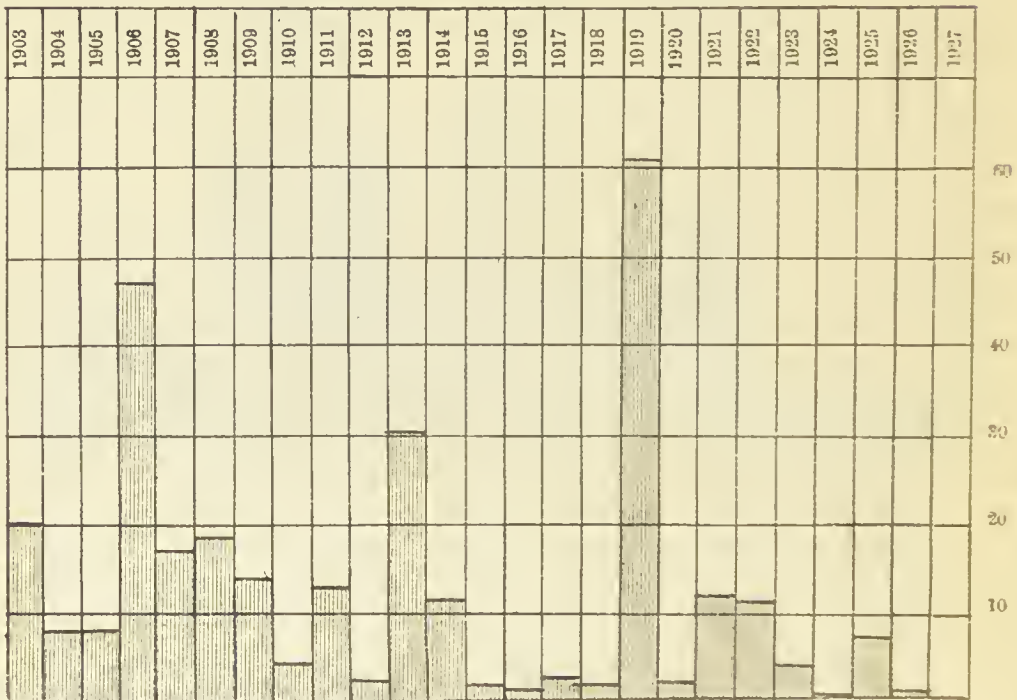
Seven deaths occurred from this disease during the year, two taking place between 1 and 5 years of age, and five between 5 and 15 years. Last year two deaths occurred from this cause.

This brings out the percentage of deaths to notifications as 11.

All the deaths occurred in Hospital. The number removed to the Isolation Hospital was 60, or 95 per cent., as compared with 94 per cent. in the previous year.

TYPHOID FEVER.

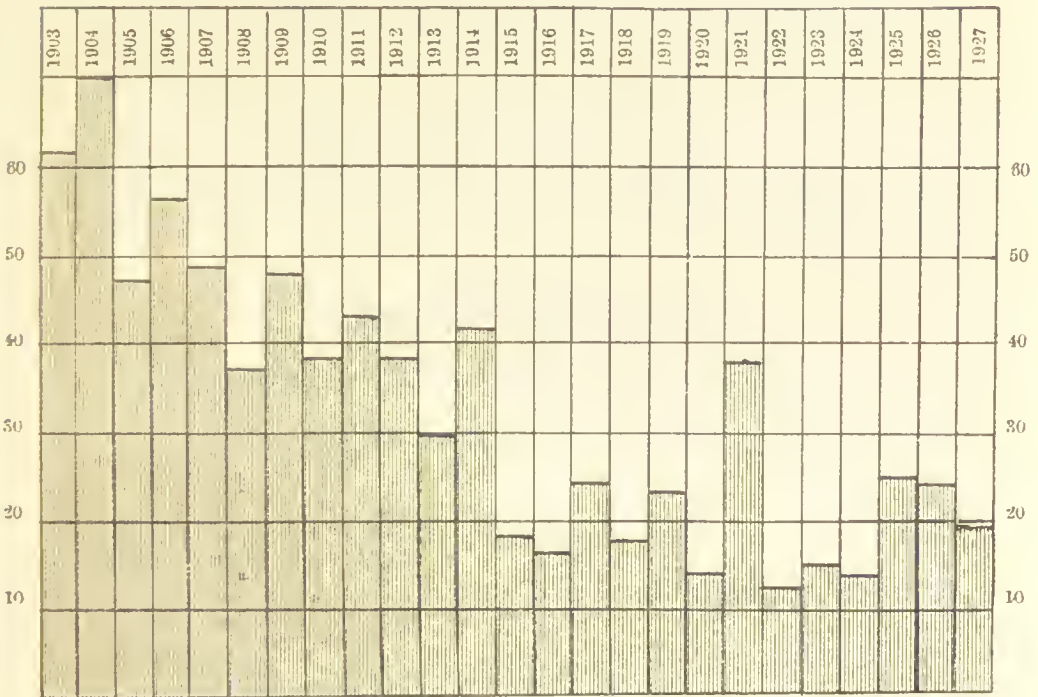
CHART SHOWING THE NUMBER OF CASES OF TYPHOID DURING THE PAST TWENTY-FIVE YEARS.



During the year no case of Typhoid Fever was notified, as compared with 2 in the previous year and 8 in 1925. In 1924 one case was notified, which under hospital observation proved not to be Typhoid, so that during the last 25 years Perth has had, as regards this disease, a clean bill of health for two periods of a year, viz., 1924 and 1927.

ERYSIPELAS.

CHART SHOWING THE NUMBER OF CASES OF ERYSIPELAS DURING
THE PAST TWENTY-FIVE YEARS.



This disease showed a slight decrease during the year, 19 cases, as compared with 24 in 1926, being notified. As is usual with the disease, the great majority of the cases were among people well up in years, 4 occurring in persons from 25 to 45 years of age, 9 from 45 to 65 years, and 4 over 65 years, the oldest age being 85 years.

It is only under exceptional circumstances that such cases are removed to Hospital—such, for instance, as residing in a caravan or lodging house, or where it is impossible for the affected person to

get the attention necessary. No case is removed for fear of the disease affecting others. Three cases were treated in Hospital, representing 15 per cent. of the total cases.

PUERPERAL FEVER.

Three cases of this fever were reported during the year, as compared with four in 1926. Two cases terminated fatally. All the cases were treated in Hospital or Royal Infirmary.

CEREBRO-SPINAL FEVER.

No case of this disease occurred during the year. The last case occurred in 1924.

ENCEPHALITIS LETHARGICA.

There were three cases of Sleeping Sickness reported during the year—the same number as in the previous year.

DYSENTRY.

One case was notified during the year.

INFECTIVE JAUNDICE.

No case of this disease was reported.

SMALLPOX.

As already stated, no case of this disease occurred in the city during the year. Considering that Perth is situated on the highway between Glasgow and Dundee, in which latter town the disease was epidemic, it was most fortunate that we escaped. As a precautionary measure printed bills, as follows, were distributed throughout the town:—

LOCAL AUTHORITY OF THE CITY OF PERTH.

SMALLPOX.

AN outbreak of Smallpox has occurred in Dundee and may become epidemic. At present the cases are mainly confined to children, all of whom were unvaccinated. Owing to the considerable traffic between Dundee and Perth, it can easily be realized that there is fear of a spread of the disease to our own City. It is a matter of grave anxiety that, owing to the conscientious objection clause, a large proportion of the children in the city—over 20 per cent.—are unvaccinated.

PREVENTION

of Smallpox may be summed up in one word :

VACCINATION OR RE-VACCINATION.

If this is not done then disastrous results may arise from the failure of the public to avail themselves of the most effective method of avoiding the disease.

Arrangements are being made whereby Vaccination free of charge can be performed by one's own Doctor, or at the Child Welfare Centre, every evening from 6 to 7 p.m. (Sundays excepted).

IT IS A MISTAKE TO DELAY.

This applies not only to the unvaccinated, but to those whose one vaccination was more than five years ago.

C. PARKER STEWART,

Medical Officer of Health.

PERTH, March, 1927.

Further, the Town Council, with a view to the prevention of the disease, agreed to grant free vaccination; and arrangements were made with the local and school doctors whereby a fee of 2/- was allowed for each vaccination performed. The Local Authority supplied the lymph, and the number vaccinated, excluding "insured" persons who did not come under the arrangement, was 692, and the cost £69 4s 0d.

In the early part of the year meetings, relative to the treatment of cases of Smallpox from the County of Perth in the Town Council's Smallpox Hospital at the Shore, took place between Committees of the County Council and the Town Council, and the following joint report contained the following recommendations, viz.:—That the Town Council agree to treat any cases of smallpox from the County of Perth, including the Burghs thereof (excepting Dunblane, Doune and Callander), on the understanding that, should the accommodation at the Shore become inadequate for the housing of all cases arising within the County and the Burgh, a joint arrangement be made for making either the Burghmuir Infectious Diseases Hospital or the Friarton Hospital available for the treatment of smallpox, and the transfer of the other infectious diseases cases to the hospital not made available for smallpox; that, subject to such arrangement, all cases of smallpox from the County, with the exception above mentioned, be treated at the Smallpox Hospital at the Shore on the following conditions, viz.:—

- (1) That the conveyance of patients be undertaken by the County;
- (2) That the Town Council accept no responsibility until the patient be in the Hospital;
- (3) That the Medical Officer of the Burgh shall have full control of the Hospital;
- (4) That the County Council will pay one-half of the annual standing charges, consisting of (a) Ground Rent, (b) Valuation, (c) Taxes, (d) Insurance, (e) Wages of Caretaker, and (f) Upkeep and repairs;

(5) That the cost of treatment be borne as follows:—

- (a) The total cost to be paid by the County if only County cases are under treatment ;
 - (b) A proportionate cost to be paid by County (judged by days in residence) if both Town and County cases under treatment ;
 - (c) For medical attendance—a fee of £4 4/- per week to be paid if County cases only under treatment—one-half of fee to be paid if both Town and County cases under treatment ;
 - (d) Nursing attendance to be paid at the rate of £2 2/- weekly per nurse, with the addition of any extra payment to nurses, but total charge not to exceed £2 10/-, provided City Hospital Nurses available. If City Nurses not available, then as per nursing fees charged.
- (6) The arrangement to be terminable by either Town or County Council at any time on giving one year's notice in writing.

CITY HOSPITAL, EDINBURGH ROAD, PERTH.

RETURN OF PATIENTS FOR THE YEAR 1927.

DISEASE.	In Hospital at end of 1926.	Admitted	Discharged.	Died.	Remain- ing in Hospital.	Age of Patients Admitted.	
						Under 5 years.	Over 5 years.
Scarlet Fever ...	15	108	104	4	15	28	80
Diphtheria ...	...	62	46	8	8	6	56
Typhoid Fever	1	...	1	..	...	...	...
Erysipelas ...	...	3	3	...	...	...	3
Puerperal Fever	...	2	1	1	...	...	2
Whooping Cough	...	2	1	1	...	...	2
Measles ...	...	9	7	1	1	...	9
Oph. Neon. ...	...	3	3	...	...	3	..
Phthisis ...	...	9	6	3	...	...	9
Tuberculosis ...	...	5	4	...	1	3	2
Total Zymotic Cases	16	203	176	18	25	40	163

The total number of admissions during the year 1927 was 203, as compared with 177 in the previous year; and the number admitted since the opening of the Hospital on 30th October, 1906, is 4288.

There have thus been 26 more cases admitted than in 1926. The greatest number ever admitted in one year was 488, and this occurred in 1925, closely followed in 1924 with 471.

The average monthly number admitted was 17, but there was considerable variation in the numbers throughout the year. Thus the average monthly number admitted during the first quarter of the year was 14, second quarter 11, third quarter 12, and fourth quarter 30. The greatest number admitted in any one month was 32 in the months of October and December, and the least number was in March and July, viz., 7.

The number of Scarlet Fever cases, including 4 admitted from the Burgh of Crieff and one from Abernethy during the year, was 108, and is 46 less than in 1926.

The average stay in Hospital of the Scarlet Fever cases has been more than in the previous year, viz., 37 days. This has not been caused by any condition approaching crowding in the wards, but is accounted for by several cases, owing to ear and nasal discharges, requiring a long period of stay in hospital. The case longest in hospital was that of a child suffering at the same time from a severe burn.

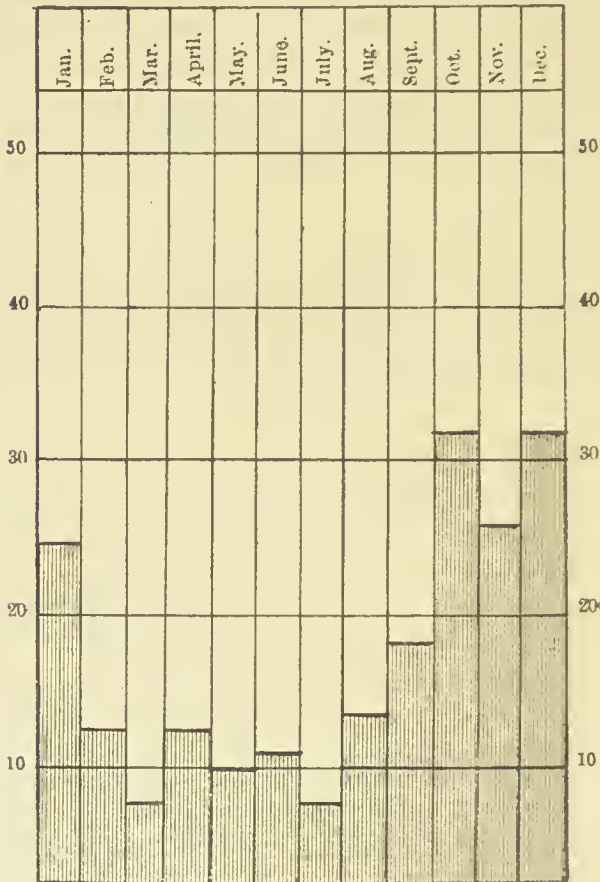
In 1919 the average stay in Hospital was 35 days, previous to which it was 6 weeks. In 1920 = 32 days, 1921 = 28 days, 1922 = 24 days, 1923 = 23 days, 1924 = 32 days, 1925 = 37 days, 1926 = 37 days, while this year it was 34 days.

Of the 351 discharged cases—6 were in a period less than 3 weeks, 37 were in a period of 3-4 weeks; 41, 4-5 weeks; 15, 5-6 weeks; 9, 6-7 weeks; 5, 7-8 weeks; 3, 8-9 weeks; 1, 12-13 weeks; and 1 over 16 weeks.

Scarlet Fever
 From figures like these, it is evident that the period of stay in hospital is an unfixed quantity, and that the popular view of six weeks detention is both a minimum and maximum period necessary for isolation is an erroneous one. Every case must be judged by itself. By the procedure carried out at the hospital during the past 7 years, the public are gradually being educated to the fact that many cases cease to be infectious as early as four weeks or less. The shortest period was 4 days and the longest 115 days.

As regards Diphtheria, 62 cases were treated during the year. This is the largest number since 1921, and no single month passed without the admission of a case into hospital. The largest number was admitted in October and December, viz., 11, followed by September with 8. In fact, the last quarter of the year was responsible for 28 cases, or 45 per cent. One case was admitted from Crieff. Many of the cases were of a severe type, and died a few days after admission. The number of deaths from this disease was 8, giving a case mortality of 13 per cent. This is a higher percentage than the previous year.

CHART SHOWING THE MONTHLY ADMISSIONS OF CASES
FOR THE YEAR 1927.



Erysipelas accounted for 3 cases and Puerperal Fever for 2, one of which was from Claekmannan.

During the year three cases of Ophthalmia Neonatorum in infants were successfully treated, while 9 cases of Measles and 2 of Whooping Cough were also admitted. One death occurred from each of the two latter diseases—in the case of Whooping Cough dying nine hours after admission. As regards the other diseases treated in Hospital, it may be observed that whereas in 1926 no case of Phthisis or Tuberculosis was admitted, no less than 9 of the former and 5 of the latter were received for treatment. In this

connection it would be a splendid acquisition to the Hospital if facilities could be given for "light ray" treatment to tubercular cases.

ADMINISTRATIVE BLOCK.

The additional bedroom accommodation for nurses in the back portion of the Administrative Block, referred to in my last Report, is now occupied ; while arrangements have been made for the repair and re-decoration of the bedrooms in the older portion of the building.

SCARLET FEVER BLOCK.

The separate heating system has now been provided in the Scarlet Fever Block, and has proved, during the recent intensive cold weather, a great comfort to the patients. A regular heat can now be obtained in the Wards, and the smoke nuisance, by dispensing with open fires, is now removed. An ample supply of hot water is obtained from a separate boiler, and baths can now be got at any time.

TYPHOID AND DIPHTHERIA BLOCK.

It is proposed to instal a system of hot water heating in the Typhoid and Diphtheria Block similar to the one recently installed in the Scarlet Fever Block. A boiler will be placed in a basement floor which can be easily formed at the north end of the block, where, owing to the slope on the ground, there is considerable under-building. The hot water pipes will be laid underneath the floors, with branches to radiators placed conveniently for the heating of the various apartments. As in the Scarlet Ward, there has been considerable trouble with smoke from the fireplaces. The site of the building in relation to the higher ground around causes constant down-draughts in the chimneys when the wind is out of a particular direction. It is intended to put in a separate boiler for the supply of hot water to the bath, lavatories, and sinks throughout the building. At present, hot water can only be obtained for baths when the boiler in the laundry is in use, and that is only one day a week.

MATERNITY AND CHILD WELFARE CENTRE.

Committee.

President—Mrs. HOWMAN.

Vice-President—Miss MAXTONE GRAHAM.

Hon. Secretary—Miss M'NAB.

Hon. Treasurer—Mrs. VASS.

Lady GEORGINA HOME DRUM-
MOND.

Mrs. LINDSAY.

Mrs. J. RITCHIE.

Mrs. THOMSON.

Mrs. FALCONER.

Mrs. M'INNES.

Miss WILKINSON.

Miss MURDOCH.

Miss DUNCAN.

Mrs. DEMPSTER.

Mrs. MOWAT WILSON.

Mrs. LITTLE

Mrs. J. WOOD.

Voluntary Workers.

Miss BUCHAN.

Mrs. FORBES.

Mrs. ROSS.

This Institution has now been in existence for 10½ years, and continues to be not only a popular rendezvous, but a fruitful source of instruction. The work of organizing and managing it is, as it should be, done by ladies, for the work and interest belong mainly to the sphere of womanhood. Perth has been distinctly fortunate in its Ladies' Committee, which has willingly given a great deal of time and devoted much attention to the work, and it has had its reward in the knowledge that its work has been appreciated by the mothers attending the Centre.

It is therefore with pleasure that I have to record another year of progress in this Branch of Public Health, and while recognising that the duty of bringing up children belongs to the mother, and that we must not be too ready to relieve them of their responsibility, yet we must see that the rights of the children are not ignored, and that the mothers have the opportunity given them of learning how best to rear their children.

Infant mortality results from many causes, and it is difficult to assess to each cause the precise effect it has upon infant mortality. Very often it happens that the same bad results come from different causes. Thus poverty is the greatest factor in deaths of infants, yet employment of mothers in cases where poverty exists only in a minor degree also leads to increased infantile mortality.

Poverty is not a simple but a complex problem, and in many

cases leads to poor health, inefficiency or lack of energy, less than average intelligence, with the result that they tend to remain on or rise little above the poverty line. Again, alcoholic habits are more easily contracted, carrying in their wake a carelessness of home and children.

Yet there are those who, poverty stricken, have shown that it does not necessarily follow that poverty is always the main cause, or is invariably connected with infant mortality.

The mother is the natural guardian of the infant, and the infants' chance of living largely depends upon whether she looks after it well or badly. With few exceptions mothers are anxious to do well by baby, and it will generally be found that it is generally due to ignorance and carelessness, rather than to wilful neglect, that they do not do all that is right. This ignorance of management is so often the cause of baby not thriving. The mother lacks the intelligence to feed and manage the baby properly. She is not aware of or does not appreciate some simple hygienic precautions, the adoption of which would lead to a healthier babe and at the same time a more contented mind to herself.

The most important factor in the health of the infant is, not the surroundings of the infant or the exact character of the milk, as the intelligent care of the mother. This intelligent care includes many things, such for example as cleanliness as regards the feeding bottles, the milk, the quantity of food given, suitable clothing, fresh air, &c.

Ignorance and lack of intelligence are two of the great evils which we have to contend against, and the experience of the Centre is that mothers are gradually becoming more willing to change from their old ways of feeding and managing their infants than they used to be. So far is this the case that mothers, attending the Centre with their second babies, are much more alive as to how to look after them than they were when they came with their first baby.

Some would have us believe that mothers, like animals, have the instinct of how to bring up their infants, but anyone with experience of the work knows too well—to put it mildly—the want of knowledge, not only of the “new” mother, but often of the mother of many.

She has *not* the natural instinct to feed her baby. She will, no doubt, do her best, but it does not follow that this is best for baby.

A young mother must be taught. She has got to learn all about the infant and how to attend to all its wants by persons with a knowledge of the subject, instead of being allowed to accept the advice of ignorant neighbours who think they are qualified to advise because they were mothers of large families which through an unkind Providence were taken from them.

As will be gathered from the attendances, the Centre has proved itself a popular rendezvous, where the large majority of mothers are not only keenly anxious to learn anything relating to the welfare of their child, but gain information useful to the conduct of their domestic affairs.

The Centre consists of a hall (where perambulators are stored), a waiting room, a weighing room and a doctor's consulting room. It is situated in an ideal place for its purpose, and has far from outlived its usefulness, but there are occasions when its capacity is overtaxed, as can be judged when it is stated that one afternoon the attendance of mothers and children was 68.

At first the Centre was open only on Thursday afternoon, but so well patronised has it been by the mothers and children—it is no exaggeration to say the undertaking has been a huge success—that it was found necessary to have two afternoons weekly (Tuesday and Thursday) for baby weighing and consultations.

The Centre is fortunate in its "Ladies Committee," of which Mrs. Howman is President and Miss M'Nab, Secretary, the members of which are thoroughly imbued with the importance of the work, and the amount of good work performed by this voluntary organisation in the tilling of the soil for the welfare of the children cannot be over estimated. The sympathy and kindness extended to the mothers has probably been the main factor in the Centre's success. All are made welcome and all are made "at home." On the other hand mothers are taking an increasing interest, and are finding it profitable in more ways than one. But the labours of the Committee have not been confined to conversations with the mothers, although the social element has never been lost sight of, nay, is made the most of, and a Sewing Class started in 1919 has been one of the most successful branches of the work.

The class meets on Wednesday afternoons throughout the winter months, and from the regularity of the attendance it is evident that the mothers appreciate it. Many new garments are made, but the re-making of old ones is the chief feature, and many a most unlikely

article—cast off garments, legs of stocking, &c.—has been transformed into a useful article for baby.

The garments cut out during the year numbered 252, and many articles of the mother's workmanship were exhibited in the windows throughout the year.

The class started on the Wednesday evenings five winters ago for young women and those mothers who were unable to attend the afternoon session has been continued, and it is pleasing to record that the attendance of the younger members has been very gratifying, and that much good work is being done.

Another important feature which has continued to meet with success is the Savings Bank. This branch is under the able superintendence of Mrs. Vass, Benview, Mrs. Ritchie and Miss Smart, Rockbank and Miss McNab, Fitzroy Terrace. Anything from a penny upwards is received, and the mother is free to take any or all whenever she desires. The number of depositors during the year was 162, being a decrease of 5 over the previous year, and the sum deposited £13 3s. 6d. Money was withdrawn to the extent of £18 5s. 4d. and it is pleasing to record that in nearly, if not in all instances, the money was withdrawn in order to buy something for baby, the purchase generally being made from the Work Stall of the Centre, which is under the supervision of Mrs. Lindsay. It may be stated that these goods are the work of the Needlework Guild. This Guild consists of 50 members, of whom Mrs. Thomson, Magdalen Bank, is Convener. It has rendered most valuable work, and a work highly appreciated by the mothers. Every article is sold to the mother at the bare cost of material. Thanks are also due to many of the Church Work Parties who contributed many serviceable articles of clothing.

The number of depositors in the first year was 66, and the number on the roll at the end of 1927 was 162. The following is a record of the year's work:—

Balance at 31st December, 1926,	...	..	£21	5	8
292 Deposits lodged during 1927,	...	...	13	3	6
			£34	9	2
29 Withdrawals during 1927,	..	...	18	5	4
Balance at 31st December, 1927,	...	...	£16	3	10

Of this balance, there had been placed to the Savings Bank Central Fund (baby bank) the sum of £16 19s 0d, on which interest had accrued to the amount of £3 10s 9d. When baby's bank

account reaches £1, this is placed into a personal Savings Bank Book. This book is kept at the Centre until the child reaches school age.

Three children who had reached school age had their bank books handed over to their mothers—the sum being £5 12s 9d.

Unemployment, largely the result of the strike during the year hit the bank very badly, but to the mother's credit, unless circumstances made it absolutely essential, baby's bank book remained untouched, and even then a shilling was left in order to keep the bank account open. Most of the money went in the provision of boots for the children.

On January 25th, a most successful tea party to the mothers, toddlers and babies attending the Centre was arranged by the Ladies' Committee. The attendance was most gratifying (close on 400) and the function much enjoyed. Several members of the Ladies' Committee, along with friends, contributed in a large measure towards the success of the function, while mention must be made of Mrs. McCurrach, Miss Connell and Mrs. Vallings, who arranged the singing and dancing parts of the programme, and Mrs. Bruce, Murthly, Miss Murdoch, and Miss Duncan, who were responsible for the Christmas tree and other decorations.

On 27th July, Lady Georgina Drummond once more showed her kindness by inviting the mothers and babies to the grounds at Hamilton House. Nature was fortunately in a kindly mood, and a happy afternoon was spent by a gathering of about 400.

The average attendance of mothers and babies at the Centre was 387 per month, as compared with 381 in 1926, and an average of 359 in the previous five years.

The number of medical consultations at the Centre during 1927 was 232, as compared with 230 in 1926.

During the year Mrs. Rodger resigned from the post of Senior Health Visitor. This post she received 10 years ago when the Centre was first started, and I cannot leave this part of my subject without recording my high appreciation of her efforts in furthering the interests of the Institution. The successful launching of the Centre, and its ever increasing success during the following years, were mainly attributable to her gift of tactfulness and sympathy, and powers of organisation.

Nurse Smith was promoted to senior, and Nurse Logie was appointed to take her place as junior.

MIDWIVES (SCOTLAND) ACT, 1915.

(1) *List of the Midwives* (with their Names in alphabetical order, Enrolment Numbers and Addresses) who have up to 31st January, 1928, given notice under Section 18 of their intention to practice in the District.

LIST OF MIDWIVES, JANUARY, 1927.

Reg. No.	NAME.	ADDRESS.
2228	Mary B. Barclay, - -	32 Caledonian Road.
5455	Christina M'Nab Cameron,	Garage House, Station Hotel.
804	Hannah B. Clark, - -	33 Scott Street.
5182	Margaret Dickson, - -	2 Robertson's Buildings.
4323	Margaret M'Gregor Doig, -	2 Florence Place.
2428	Margaret J. Forbes, - -	85 Princes Street.
1898	Elizabeth Laing, - -	20 Market Street.
578	Isabella H. Mackay, - -	Braehead, Jeanfield.
2583	Ann M. Malcolm, - -	4 South Methven Street.
4014	Lilias Moncrieff, - -	36 Jeanfield Road.
2289	Catherine R. M'Lean, -	8 Hospital Street.
1775	Annie M'Quhae, - -	11 Gowrie Street.
2456	Jessie A. Rattray, - -	36 George Street.
2479	Annie Robertson, - -	18 Watergate.
3014	Agnes Shilland, - -	6 Hawarden Terrace
3175	Margaret Williamson, -	30 South Street.
6148	Catherine Whytock, - -	58 Scott Street.

(2) Births in Area or District.

Total Number of Births during 1927.	Total Number of Deaths of new-born children (within ten days) during 1927.	Actual Number of Births attended by Midwives during 1927.	Actual Number of Deaths of new-born children (within ten days) occurring in the practice of Midwives during 1927.	Actual Number of Cases not attended by a Doctor or Midwife during 1927.
572.	13.	72.	1.	Births. — Deaths. —

(3) Cases of Ophthalmia Neonatorum.

Total Number of Cases during 1927.	Actual Number of Cases occurring in the practice of Midwives during 1927.	Actual Number of Cases occurring where confinement not attended by a Doctor or Midwife during 1927.
6.	2	—

(4) Cases of Puerperal Sepsis.

Total Number of Cases during 1927.	Total Number of Deaths during 1927.	Actual Number of Cases occurring in the practice of Midwives during 1927.	Actual Number of Deaths occurring in the practice of Midwives during 1927.	Actual Number of Cases occurring where confinement not attended by a Doctor or Midwife during 1927.
3.	2.	—	—	Cases. — Deaths. —

(5) Cases of Still-birth (Dead Born).

Total Number of Cases during 1927.	Actual Number of Cases occurring in the practice of Midwives during 1927.
30.	4.

(6) Cases of Emergency. —The number of Cases of Emergency to which medical practitioners have been called in under Section 22 of the Act during 1927 was 2. These related to two cases of prolonged labour.

(7) General Remarks. —The working of the Act has been carried out satisfactorily during the year and no action for breach of the Regulations has been necessary.

STATISTICS RELATING TO MATERNITY SERVICE AND CHILD WELFARE.

Infant Mortality.

(a) No. of deaths	...	39	(b) Rate per 1000 births =	68
(c) Age Groups—				
Under 1 week	...	...	...	11
1 week and under 4 weeks,	...	...	...	3
4 weeks and under 3 months	...	...	...	8
3 months and under 6 months	...	...	...	7
6 months and under 12 months	...	...	...	10
(d) Causes of Death—				
Congenital Malformations	4	Premature Birth	...	5
Whooping Cough	4	Atrophy Debility	...	7
Convulsions	1	Overlain	...	1
Bronchial Pneumonia	7	Injury at Birth	...	1
Bronchitis	3	Other Causes	...	4
Enteritis	2			

Infantile Mortality is referred to in greater detail at page 12 of the Report.

Births.

- (a) No. registered—Legitimate, 526 ; Illegitimate, 46.
 (b) No. notified, 566. (1) Doctor, 494 ; (2) Midwife, 72.
 (c) No. of Still Births, 30.

Maternal Mortality.

(a) No. of deaths from Miscarriage or Child Birth	...	2
(b) No. of deaths from Puerperal Sepsis	...	2

Home Visitation.

(a) No. of first visits	...	...	...	558
(b) No. of re-visits	...	...	...	5506
(c) No. of Infants at 6 months—				
(1) Breast Fed	...	...	...	275
(2) Partially Breast Fed	...	...	...	64
(3) Artificially Fed	...	...	...	156
(d) No. of visits to Children (1-5 years)	...	...	...	234

Expectant Mothers—

(a) No. of first visits to expectant Mothers	...	...	...	101
(b) No. of re-visits	...	...	...	133
(c) No. of consultations	...	...	...	2

Ante-Natal Consultations.

Clinics held twice weekly on Tuesday and Thursday, 3 to 4:30 p.m.

(a) No. of attendances	...	...	...	3
(b) No. of first attendances	...	...	...	3
(c) Conditions found—				
Anæmia	2
Normal	1

Post-Natal Consultations.

No. of attendances	7
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Child Welfare Consultations.

(a) No. of attendances under 1 year	1992
,, ,, over 1 year	1419
(b) No. of first attendances under 1 year	...	...	...	204
,, ,, over 1 year	...	...	...	24
(c) Illnesses recorded—				
Bronchitis	...	...	...	9
Injuries	...	...	...	12
Otorrhœa, Abscess	...	...	of each	8
Tongue tied, Phymosis	...	...	,,	4
Skin Diseases	...	...	...	33
Diarrhœa, Enteritis	...	...	...	15
Debility, Whooping Cough, Rickets	...	...	of each	6
Ringworm, Constipation, Tuberculosis, Worms,	...	...	...	...
Cyst	..	...	of each	3

Alopecia, Hernia	...	...	of each	2
Chickenpox, Measles, Conjunctivitis, Strabismus, Rheumatism, Tonsillitis, Scabies, Cystitis, Fit, Prolapse, Warts, Epistaxis	...	...	of each	1

Ultra Violet Light Clinic.

(Royal Infirmary).

No. of attendances	...	...	...	4651
No. of cases	...	...	...	253
Note of Conditions—Rickets, Tuberculosis, Marasmus, Skin Diseases.				

Day Nursery.

No. of attendances	...	...	..	4533
Charges—8d. per day ; if two, 7d. each.				
Income	...	...	£534	1 11
Expenditure	...	...	£537	0 10
Payments made by parents	...	...	£118	10 2

Food and Milk.

Gross cost	£56	8	1	Sums recovered	£7	15	6
No milk substitutes given.							

Measles.

No. of deaths	...	...	...	...	2
No. treated in Hospital	...	...	...	...	1

Whooping Cough.

No. of deaths	...	...	...	...	7
No. treated in Hospital	...	...	...	...	2

Ophthalmia Neonatorum.

No. of cases notified by Doctor	...	...	...	4
No. of cases notified by Midwife	...	...	...	2
No. treated in Hospital	...	...	...	4
Appreciable loss of vision	..	...	...	0

Maternity Hospital.

(Royal Infirmary).

(1) Ante-Natal cases—

No. of cases treated 14

Statement of conditions found—

Conditions found	Cases	Result
Albuminuria of Pregnancy ..	4	successfully treated
Eclampsia	6	5 successful, 1 died
Accidental Hæmorrhage ...	3	successfully treated
Hyperæmiosis Gravidorum ...	1	died

(2) Abortions—

No. of cases 24

Results ... 23 successfully treated ; 1 died

(3) Abnormal or complicated confinements—

No. of cases 16

Conditions found	Cases	Result
Placenta Prævia ...	1	successful
Post Partum Hæmorrhages	3	successful
Brow Presentation ...	1	successful craniotomy
Face Presentation ...	1	successful
Breech Presentation ...	10	successful

(4) Other cases of confinement—

(a) No. of normal deliveries with and without
medical attendance 139

(b) No. of instrumental deliveries (exclusive
of those appearing under (3)). ... 18

(c) No. of cases of morbidity (B.M.A. standard) no record

(d) No. of cases under (c) in which delivery
was instrumental no record

(e) No. of deaths (classified) 2 (see above)

(5) No. of infants born—

Alive 129

Still 10

(6) No. of deaths of infants under 1 week ... —

(7) No. of cases of puerperal fever removed from
Institution —

Educational.

Sewing meetings held weekly from October to March.

The number of attendances was 750.

V.D. CENTRE.

The Centre was opened in May, 1923. It is a one storey brick building, and has been erected adjacent to the Out-Patient Department of the Infirmary. Its accommodation consists of (1) Office, (2) Waiting Room, (3) Treatment Room, (4) Rest Room, and (5) Irrigation Room.

It acts as an Out-Patient Clinic, no provision being made for resident cases, and is for the use of both City and County, and the times for consultation are :—

COUNTY PATIENTS :—Women—Monday, 3 to 4 p.m.

Men—Thursday, 3 to 4 p.m.

CITY PATIENTS :—Women—Monday, 6 to 7 p.m.

Men—Thursday, 6 to 7 p.m.

The following is a record of the work done :—

VENEREAL DISEASES REPORT.

THE FOLLOWING IS A RECORD OF THE WORK BY DR. TROTTER FOR THE YEAR ENDING 15TH MAY, 1927, AT THE PERTH ROYAL INFIRMARY.

	SYPHILIS.		GONORRHOEA.		SOFT CHANCRE.		MIXED INFECTIONS.		CONDITIONS OTHER THAN VENEREAL.		TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Number of New Cases,	16	12	24	4	—	—	—	—	12	3	52	19
Number of persons who ceased to attend the Centre <i>before</i> completing the course of treatment,	3	1	—	—	—	—	—	—	—	—	3	1
Number of persons transferred to other Treatment Centres after treatment, ...	1	1	—	—	—	—	—	—	—	—	1	1
Number of persons discharged from the Centre,	10	6	20	3	—	—	—	—	12	3	42	12
Number of persons who, at the end of the year, were under treatment or observation,	20	12	6	2	—	—	—	—	—	—	26	14
Total attendances of all persons,	357	201	378	130	—	—	included under syphilis.	—	24	7	759	338
Do. do. do. in 1926,	294	148	353	48	3	—	—	—	17	10	667	206

Area in which patient resided :		CITY AREA.		COUNTY AREA.		OTHER SCOTTISH AREAS.		TOTAL.	
Number of persons from each area dealt with during the year for the first time :									
(a)	SYPHILIS,	16		11		1		28	
(b)	GONORRHOEA,	21		7		—		28	
(c)	SOFT CHANCER,	—		—		—		—	
(d)	MIXED INFECTIONS,	—		—		—		—	
(e)	Conditions other than Venereal,	12		3		—		15	
TOTAL,		49		21		1		71	
Total number of attendances at Out-patient Department,		590		277		30		917	
Number of doses of Salvarsan substitutes,		90		30		20		140	

Age of persons treated.		SYPHILIS		GONORRHOEA		MIXED INFECTIONS.		TOTAL.	
		M.	F.	M.	F.	M.	F.	M.	F.
(a)	Under 1 year,	—	—	—	—	—	—	—	—
(b)	1 and under 5 years,	—	1	—	—	—	—	—	1
(c)	5 " " 15 " "	1	—	—	—	—	—	1	—
(d)	15 " " 25 " "	5	5	7	3	—	—	12	8
(e)	25 years and upwards,	10	6	17	1	—	—	27	7
TOTALS,		16	12	24	4	—	—	40	16

FACTORIES AND WORKSHOPS.

Many inspections were made during the year of the Factories and Workshops, including the Bakehouses, and some improvements effected. In 8 cases attention was directed to want of cleanliness, and to inefficient or defective sanitary accommodation and these were remedied.

Speaking generally, it must be said that the management of the Factories and Workshops is conducted in a manner whereby the interests of the workers in matters relating to their general health are well looked after, and I feel sure that Perth will compare favourably with any city in the kingdom.

There are three underground bakehouses in the Burgh; and in accordance with the Factory and Workshops Act of 1901 these were granted Certificates by the Local Authority, the requirements of the Act being fulfilled in all respects.

As certifying Factory Surgeon, I examined for fitness for employment in factory or workshop, a total of 221 young persons, or 24 more than the previous year. Of these 43 were males, and 178 were females. This shows as compared with the previous year a decrease of males employed of 17, and an increase of females of 41. The figures for 1926 were 60 males and 137 females. All must have attained the age of 14 before being allowed to work.

I am glad to report that only 2 cases were rejected as unfit for work, being 6 less than in the previous year, and both being on account of uncleanness. Extreme cases of head lousiness have been, in recent years, very much reduced, the result largely of bobbing of the hair. Broadly speaking, the less educated people are, the more they tend to harbour head lice. Poverty, bad housing, bad sanitation, it can safely be said, render cleanliness a condition more difficult to obtain, yet they certainly are not a bar, and one comes across many cases of vermin infection where they do not exist.

In each instance it was the condition of the hair which was at fault, and both occurred among girls. These cases are sad, in respect that the cause is easily removable and implies a want of care and disregard for the most elementary laws of health. All such cases are subject to re-examination before being allowed to work. Some parents think the penalty of their children not being allowed to work too severe for the crime, but a little reflection shows how unfair it would be to the other employees. Moreover the cure is easy.

1. INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspector.

Premises. (1)	Number of	
	Inspections. (2)	Written Notices. (3)
Factories (including Factory Laundries) -	12	—
Workshops (including Workshop Laundries)	139	11
Workplaces (other than Outworkers' premises)	2	—
TOTAL - -	153	11

2. DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars (1)	Number of Defects.	
	Found. (2)	Remedied. (3)
<i>Nuisances under the Public Health Acts—</i>		
Want of Cleanliness - - - -	6	6
Other Nuisances - - - -	3	3
<i>Sanitary Accommodation—</i>		
Insufficient - - - -	1	1
Unsuitable or Defective - - -	1	1
TOTAL -	11	11

WATER SUPPLY.

Perth, in addition to supplying water to its own inhabitants, also provides water for the district of Scone.

The number of reservoirs is five, one at Wellshill (430,000 gallons), Viewlands (830,000), Muirhall (1,800,000), and two at Burghmuir (each 2,000,000). The total capacity of these reservoirs is 7,060,000 gallons, and this, with a daily supply (for trade and domestic purposes) of about 2,200,000 gallons, indicates a storage of little over three days' supply.

The total quantity of water pumped in 1927 was 830,799,600 gallons, being an increase of 38,310,300 gallons, as compared with the previous year.

The water supply by meter was 206,767,000 gallons, as compared with 186,275,000 in 1926. This shows an increase of 20,492,000 gallons. In addition, 36,000,000 gallons are supplied by agreement.

In other words a total of over 588,032,600 gallons of water have been used for domestic purposes. This implies a daily supply of over 1,610,000 gallons, and, based on a population of 34,000, gives a daily supply per head of 47 gallons.

In my last year's Report I stated that estimates were being taken for the City's water supply from the gravel and sand bank opposite the Woody Island. The work is being done in two sections, Owing to weather conditions, little or no progress was made at the intake at Woody Island. With regard to the Reservoir Section, half of the embankment has been constructed and 40% of the pumping main laid.

During the year several analyses of the water were made and these are summarized in the following table:—

SUMMARY OF ANALYSES OF RIVER TAY WATER.

Date.	15/4/27.	24/5/27.	30/7/27.	30/8/27.	25/10/27.
Before Chlorination	Water House.				Water House.
	No. of Micro-organisms per 1 c.c.	5.3			67
	No. of Bacilli Coli per 1 c.c.	Absent in 10 c.c.			2.4 in 1 c.c.
After Chlorination	Fire Station.	Fire Station.	Dovecotland.	Dovecotland.	Examination for Free Chlorine.
	No. of Micro-organisms per 1 c.c.	2.3	56	18	24/5/27. 30/12/27.
	No. of Bacilli Coli per 1 c.c.	Absent in 10 c.c.	1 in 19.5 c.c.	7 in 10 c.c.	No trace of Free Chlorine or odour or taste of Chloride of Lime.

VACCINATION (SCOTLAND) ACT, 1907.

Return of Statutory Declarations of Conscientious Objection delivered to the Registrar.

It will be noted from the table given below how, for a period of years, advantage was taken of the Conscientious Objection to vaccination, reaching a maximum in 1917 with a percentage of 34·8 unvaccinated. From that date the percentage gradually declined until 1920 to 21·2, but from that time to 1924 has steadily increased. The last three years show an improvement, but I would like to see this percentage reduced to the figure of 1907, as I fear the greater the accumulation of unvaccinated children, the greater will be the epidemic should Smallpox get a foothold in the city.

Year.	No. of Births.	No. of Unvaccinated.	Percentage of Unvaccinated.
1907	802	3	·3
1908	794	57	7·1
1909	805	92	11·4
1910	786	148	18·8
1911	760	163	21·4
1912	791	184	23·2
1913	711	209	29·3
1914	727	194	26·6
1915	644	213	33·0
1916	685	229	33·4
1917	516	180	34·8
1918	477	119	25·0
1919	614	144	23·4
1920	844	180	21·2
1921	646	145	22·4
1922	691	164	23·7
1923	704	174	24·7
1924	597	155	25·9
1925	562	124	22·1
1926	661	153	23·1
1927	602	123	20·1
Total	14419	3153	21·8

SLAUGHTER-HOUSE.

The Slaughter House was visited by me on one or two occasions during the year in order to ascertain the general sanitary conditions, and it can be reported that the premises were kept in satisfactory order. The gut-house, to which I have in previous Reports drawn attention, is in my opinion far from ideal, and an improvement in space, lighting and ventilation, would be beneficial to the workers concerned. The following Report relating thereto was submitted.

The number of animals slaughtered in 1927 was—

Cattle,	3912,	of which 48 were wholly unfit and 23 partially.
Sheep,	27,803,	„ 50 „ „ 2 „
Pigs,	2175,	„ 2 „ „ 1 „
Calves,	86,	„ 4 „ „ — „

The weight of the condemned material was—Beef, 23,124 lbs. ; Mutton, 1,712 lbs. ; Pork, 512 lbs. ; Veal, 338 lbs.

During the year Mr. Brown, V.S., who was appointed for the purposes of Section 43 of the Public Health (Scotland) Act, 1897, was called by the Superintendent on several occasions. The following table gives a summary of the diseases and number of animals, either partially or wholly unfit for food.

	Ox.	Cow.	Sheep.	Pig.	Calf.
Tuberculosis ..	8	34	—	3	3
Septic Conditions ...	5	1	4	—	—
Decomposition ...	2	2	26	—	—
Emaciation ...	1	2	—	—	—
Bruising ...	3	5	4	—	—
Uremia ...	1	—	—	—	—
Anthrax ...	—	—	—	—	—
Pneumonia ...	—	—	17	—	—
Dropsy ...	—	2	—	—	—
Other Conditions ...	4	1	1	—	1
Total ...	24	47	52	3	4

The following Report was submitted on 17th August.

SLAUGHTER HOUSE.

The chief disadvantages under which the present Gut premises suffer may be shortly stated as follows:—

- (a) Want of accommodation. This results in the busy time in the men employed, when handling the offal, frequently getting their clothing in an insanitary condition.
- (b) Want of lighting.
- (c) Want of ventilation. The cramped condition of the Gut house makes it difficult to ventilate, and in winter time the men find, if the outlet at the top of the roof is opened, the cold downward draught makes it impossible for them to carry on work.
- (d) Want of drying accommodation. This means that the skins are conveyed elsewhere—in this case to the tripery, where they are hung over the boiler. Once in placing these skins there, the man broke the stone work, resulting in the flames escaping and damaging the roof rafters.
- (e) Irregularities of floor, causing formation of pools of water, leading to soaking of boots, &c.

I might suggest that considerable improvement might be effected by (1) Demolition of the existing partition with removal of the office part to the north end corner, and the formation of a drying chamber on the north side, and taking advantage at the same time of increasing the window space in front, or (2) Demolition of existing partition and office, and formation of a new drying room and office in a new upper storey.

I may remark that the place was remarkably clean considering the circumstances.

Following this report the Corporation has arranged to carry out alterations and improvements on the premises thereby removing the defects to which attention had been drawn.

